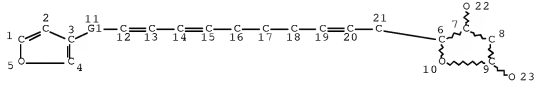
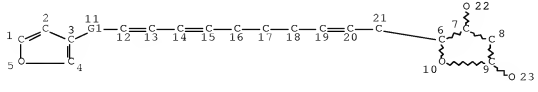
```
=> dis his nofile

     (FILE 'HOME' ENTERED AT 10:10:31 ON 22 JUL 2008)

     FILE 'REGISTRY' ENTERED AT 10:10:44 ON 22 JUL 2008
L1                STR
L2             0 SEA SSS SAM L1
L3                STR L1
L4             1 SEA SSS SAM L3
                  D SCAN
L5            11 SEA SSS FUL L3
L6                STR L3
L7             6 SEA SSS SAM L6
L8            57 SEA SSS FUL L6
L9            11 SEA SUB=L5 SSS FUL L6
L10           46 SEA ABB=ON  PLU=ON  L8 NOT L9

=> d l5 que stat;d l10 que stat
L3                STR
```



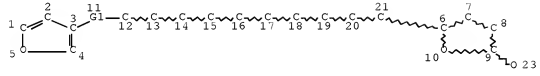
```
REP G1=(3-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE
L5            11 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED     330 ITERATIONS                          11 ANSWERS
SEARCH TIME: 00.00.01



L3                STR
```



REP G1=(3-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
L5 11 SEA FILE=REGISTRY SSS FUL L3
L6 STR



REP G1=(0-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L8 57 SEA FILE=REGISTRY SSS FUL L6
L9 11 SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L10 46 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT L9

=> fil caplus;s l5 or l10

FILE 'CAPLUS' ENTERED AT 10:17:27 ON 22 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Jul 2008 VOL 149 ISS 4
FILE LAST UPDATED: 20 Jul 2008 (20080720/ED)

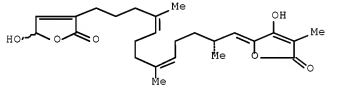
Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.

They are available for your review at:

http://www.cas.org/legal/infopolicy.html

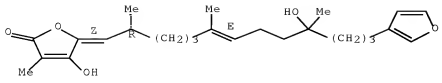
```
            11 L5
            48 L10
L11         54 L5 OR L10

=> d 1-11 ibib abs hitstr

L11  ANSWER 1 OF 54  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:337052  CAPLUS  Full-text
DOCUMENT NUMBER:          148:467261
TITLE:                    Sesterterpenoids from the Sponge Sarcotragus sp.
AUTHOR(S):                Wang, Nan; Song, Jueun; Jang, Kyoung Hwa; Lee,
                          Hyi-Seung; Li, Xian; Oh, Ki-Bong; Shin, Jongheon
CORPORATE SOURCE:         Natural Products Research Institute, College of
                          Pharmacy, Seoul National University, Seoul, 151-742,
                          S. Korea
SOURCE:                   Journal of Natural Products (2008), 71(4), 551-557
                          CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER:                American Chemical Society-American Society of
                          Pharmacognosy
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
GI
```



I

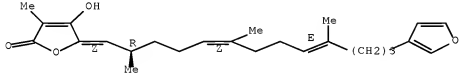
AB Nineteen new sesterterpenoids (e.g. I) and eight known compds. were isolated from the sponge Sarcotragus sp. collected from Soheuksan Island, Korea. The structures of these compds. were determined to be linear sesterterpenoids containing furan or related oxygenated functionalities on the basis of combined chemical and spectroscopic analyses. In addition, the configurations of several previously undetd. compds. were assigned. Several compds. exhibited moderate to major antibacterial activity and cytotoxicity against the K562 cell line and inhibitory activity against isocitrate lyase.

```
IT   82124-11-6  1020667-68-8, (8E,13Z,18R,20Z)-Strobilinin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (sesterterpenoids from sponge Sarcotragus sp.)
RN   82124-11-6  CAPLUS
CN   2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-
     tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)-  (CA INDEX NAME)

Absolute stereochemistry.  Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.
```



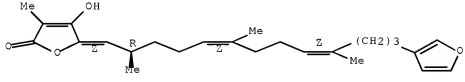
RN 1020667-68-8 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT 1020667-56-4, (8Z,13Z,18R,20Z)-Strobilinin
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(sesterterpenoids from sponge Sarcotragus sp.)
RN 1020667-56-4 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1303146 CAPLUS Full-text
DOCUMENT NUMBER: 147:536630
TITLE: Mass spectrometry assay for multiplexed quantification of protein kinases and phosphatases utilizing a kinase/phosphatase inhibitor as a capture agent
INVENTOR(S): Patton, Wayne F.; Xie, Bing
PATENT ASSIGNEE(S): Perkinelmer Life and Analytical Sciences, USA
SOURCE: PCT Int. Appl., 42pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007131191	A2	20071115	WO 2007-US68282	20070504
WO 2007131191	A3	20080214		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2006-798436P P 20060505

AB The inventions relates to methods and kits for capture and/or anal. of kinases and/or phosphatases in one or more samples. In some embodiments, a kinase inhibitor, e.g. staurosporine or its derivative, is used to capture kinases from a sample. In some embodiments, a phosphatase inhibitor, e.g. microcystin or its derivative, is used to capture phosphatases from a sample. Methods for quant. anal. of captured kinases and/or proteases are also provided. Quant. anal. is accomplished using mass spectrometry. In addition, the invention provides kits related to same.

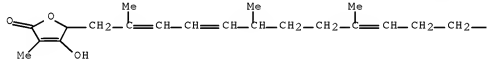
IT 152340-15-3, Isopalinurin

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (phosphatase inhibitor; mass spectrometry assay for multiplexed quant. determination of protein kinases and phosphatases utilizing kinase/phosphatase inhibitors as capture agents)

RN 152340-15-3 CAPLUS

CN 2(5H)-Furanone, 5-[(2E,4E,9E)-12-(3-furanyl)-2,6,9-trimethyl-2,4,9-dodecatrien-1-yl]-4-hydroxy-3-methyl- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

L11 ANSWER 3 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

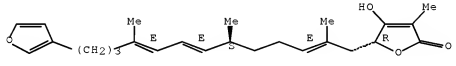
ACCESSION NUMBER: 2007:896334 CAPLUS Full-text

DOCUMENT NUMBER: 147:335317

TITLE: Marine compounds as a new source for glycogen synthase kinase 3 inhibitors

AUTHOR(S): Alonso, Diana; Martinez, Ana
CORPORATE SOURCE: NeuroPharma, Madrid, 28760, Spain
SOURCE: Glycogen Synthase Kinase 3 (GSK-3) and Its Inhibitors (2006), 307-331. Editor(s): Martinez, Ana; Castro, Ana; Medina, Miguel. John Wiley & Sons, Inc.: Hoboken, N. J.
CODEN: 69JQDV; ISBN: 978-0-471-77001-5
DOCUMENT TYPE: Conference; General Review
LANGUAGE: English
AB A review discusses furanoses-quiterpene palinurine, the complex alkaloid manzamine A, and the isoflavone genisteine produced by a marine microorganism as new source for glycogen synthase kinase 3 inhibitors.
IT 71947-64-3, Palinurin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(marine compds. as new sources for glycogen synthase kinase 3 inhibitors)
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:810739 CAPLUS Full-text
DOCUMENT NUMBER: 147:134416
TITLE: Furanosesterterpenes for treating diseases caused by oxidative stress
INVENTOR(S): Kim, Dong Kyoo; Jung, Jee Hyung; Jiang, Ya Hong; Ahn, Eun Young; Ryu, Seung Hee; Lee, Burm Jong
PATENT ASSIGNEE(S): Inje University Industry-Academic Cooperation Foundation, S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007014353	A	20070201	KR 2005-68916	20050728
PRIORITY APPLN. INFO.:			KR 2005-68916	20050728

AB A composition comprising furanosesterterpenes having anti-oxidation activity is provided to prevent and treat diseases caused by oxidative stresses by removing free radical and superoxide radical, and inhibiting DNA damage induced by hydroxyl radical. The preferred furanosesterterpenes from Psammocinia sp. are (8E,13Z,20Z)-strobilinin and (7E,13Z,20Z)-felixinin; the diseases caused by oxidative stresses include cancer, aging, coronary

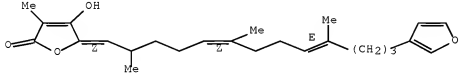
sclerosis, diabetes, epilepsy and neurodegenerative disease. The compds. are formulated into oral pharmaceuticals and health foods.

IT 158252-27-8P, (8E,13Z,20Z)-Strobilinin
RL: DMA (Drug mechanism of action); FFD (Food or feed use); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(furanosesterterpenes for treating diseases caused by oxidative stress)

RN 158252-27-8 CAPLUS

CN 2(5H)-Furanone, 5-[(5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



L11 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:810738 CAPLUS Full-text

DOCUMENT NUMBER: 147:134415

TITLE: Furanosesterterpenes for the prevention and treatment of tumors

INVENTOR(S): Kim, Dong Kyoo; Jung, Jee Hyung; Jiang, Ya Hong; Ahn, Eun Young; Ryu, Seung Hee; Lee, Burm Jong

PATENT ASSIGNEE(S): Inje University Industry-Academic Cooperation Foundation, S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007014352	A	20070201	KR 2005-68915	20050728

PRIORITY APPLN. INFO.: KR 2005-68915 20050728

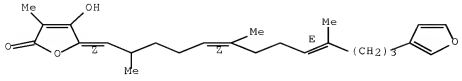
AB A composition for the prevention and treatment of cancer disease comprising furanosesterterpenes having inhibitory activity of tumor cell propagation is provided to inhibit cell cycle (S phase) by inhibiting activity of topoisomerase I and DNA polymerase α-primase. The furanosesterterpenes are isolated from Psammocinia sp. and formulated in oral prepns. which include health foods.

IT 158252-27-8P
RL: DMA (Drug mechanism of action); FFD (Food or feed use); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(furanosesterterpenes from Psammocinia sp. as antitumor agents)

RN 158252-27-8 CAPLUS

CN 2(5H)-Furanone, 5-[(5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



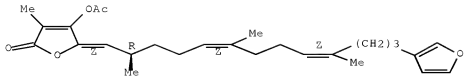
L11 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:510809 CAPLUS Full-text
DOCUMENT NUMBER: 147:296463
TITLE: Cytotoxic effects of furanosesterterpenes, cyclitol derivatives, and bromotyrosine derivative isolated from marine sponges
AUTHOR(S): Sohn, Jae Hak; Oh, Hyuncheol; Jung, Jee H.; Bae, Song-Ja
CORPORATE SOURCE: Division of Food and Nutrition, Silla University, Pusan, 617-736, S. Korea
SOURCE: Journal of Food Science and Nutrition (2005), 10(3), 257-261
CODEN: JFSNFW; ISSN: 1226-332X
PUBLISHER: Korean Society of Food Science and Nutrition
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Marine sponges are known to produce a number of cytotoxic secondary metabolites. In the course of searching for cytotoxic metabolites from marine organisms, we have evaluated cytotoxic activities of six marine secondary metabolites isolated from various sponges. The cytotoxic compds. 1-6 were isolated by the application of various chromatog. methods, including column chromatog. and HPLC. The mol. structures were mostly determined using mass spectrometry (MS) and NMR spectroscopy. Furanosestererpenes (compds. 1-3) from Psammocinia sp., cyclitol derivs. (compds. 4 and 5) from Sarcotragus sp., and bromotyrosine-type compound (6) from an association of two sponges Jaspis wondoensis and Poecillastra wondoensis were evaluated for their cytotoxic activity against three cancer cell lines; Hep G2, HeLa, and MCF-7. All tested compds. exhibited cytotoxicity at concns. ranging from 5-25 μg/mL. Particularly, among the tested compds., compound 6 showed the highest potency displaying at least 80% of cytotoxicity at 5 μg/mL level against all three cancer cell lines.

IT 187106-27-0, (8Z,13Z,18R,20Z)-Strobilinin 187106-44-1, (8E,13Z,18R,20Z)-Strobilinin
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(cytotoxic effects of furanosesterterpenes, cyclitol derivs., and bromotyrosine derivative isolated from marine sponges)

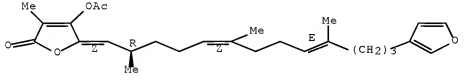
RN 187106-27-0 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



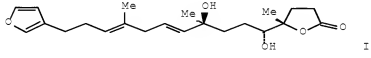
RN 187106-44-1 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:478964 CAPLUS Full-text
DOCUMENT NUMBER: 145:141417
TITLE: Novel linear C22-sesterterpenoids from sponge Ircinia formosana
AUTHOR(S): Shen, Ya-Ching; Lo, Kuang-Liang; Lin, Yu-Chi; Khalil, Ashraf Taha; Kuo, Yao-Haur; Shih, Pei-Show
CORPORATE SOURCE: Institute of Marine Resources, National Sun Yat-sen University, Taichung, 80424, Peop. Rep. China
SOURCE: Tetrahedron Letters (2006), 47(24), 4007-4010
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



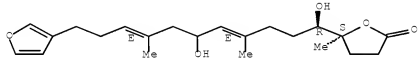
I

AB Four unprecedented C22-sesterterpenes, irciformonins A (I)and B-D, have been isolated from the marine sponge Ircinia formosana, collected off the coast of eastern Taiwan. The structures of the isolated metabolites were established on the basis of extensive spectral anal., primarily 1- and 2D-NMR. Compds. 3 and 4 exhibited significant cytotoxicity against human colon (WiDr) tumor cells.

IT 667402-56-4P, Irciformonin B 898867-03-9P, Irciformonin A

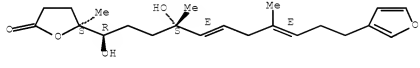
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(novel linear C22-sesterterpenoids from sponge Ircinia formosana)
RN 667402-98-4 CAPLUS
CN 2(3H)-Furanone, 5-[(1R,4E,8E)-11-(3-furanyl)-1,6-dihydroxy-4,8-dimethyl-4,8-undecadien-1-yl]dihydro-5-methyl-, (5S)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.
Double bond geometry as shown.
Currently available stereo shown.



RN 898807-03-9 CAPLUS
CN 2(3H)-Furanone, 5-[(1R,4S,5E,8E)-11-(3-furanyl)-1,4-dihydroxy-4,8-dimethyl-5,8-undecadien-1-yl]dihydro-5-methyl-, (5S)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.
Double bond geometry as shown.
Currently available stereo shown.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1133574 CAPLUS Full-text
DOCUMENT NUMBER: 144:142243
TITLE: Mechanism of cell cycle arrest by (8E,13Z,20Z)-strobilinin/(7E,13Z,20Z)-felixinin from a marine sponge Psammocinia sp
AUTHOR(S): Jiang, Yahong; Ahn, Eun-Young; Ryu, Seung-Hee; Kim, Dong-Kyoo; Park, Jang-Su; Kang, Shin Won; You, Song; Lee, Burm-Jong; Jung, Jee H.
CORPORATE SOURCE: Department of Chemistry and Biohealth Product Research Center, Inje University, Kimhae, 621-749, S. Korea
SOURCE: Oncology Reports (2005), 14(4), 957-962
CODEN: OCRPEW; ISSN: 1021-335X
PUBLISHER: Oncology Reports
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Furanosesterterpenes, isolated from a marine sponge Psammocinia sp. have been reported to display significant cytotoxicity to some cancer cell lines. In this study, EZZ, an inseparable 1:1 mixture of (8E,3Z,20Z)-strobilinin and (7E,3Z,20Z)-felixinin, showed significant antiproliferative effect on human cervix carcinoma cell line (HeLa). Cell cycle anal. revealed that EZZ could

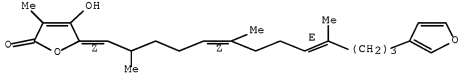
arrest HeLa cells in S phase with a concomitant decrease in the cell population of G1 phase. By using simian virus (SV40) DNA in vitro replication system, we found that EZZ could inhibit DNA replication, which suggests that EZZ-induced S phase arrest might be the direct result of blocked DNA synthesis. Furthermore, low concentration of EZZ was found to be capable of significantly inhibiting the DNA cleavage by topoisomerase I (topo I) and reducing the polymerase α-primase (pol α-primase) activity, while the ssDNA binding activity of replication protein A (RPA) was less affected. Taken together, these results suggest that EZZ-induced cell cycle arrest in S phase correlate with the inhibition of DNA replication, and topo I and pol α-primase might be the two main target mols.

IT 158252-27-8, (8E,13Z,20Z)-Strobilinin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(EEZ induced cell cycle arrest in S phase, inhibit DNA replication, DNA cleavage by topoisomerase I, reduced polymerase α-primase, ssDNA binding of replication protein A in human cervix carcinoma cell line HeLa)

RN 158252-27-8 CAPLUS

CN 2(5H)-Furanone, 5-[(5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2005:944609 CAPLUS Full-text
DOCUMENT NUMBER:	143:343266
TITLE:	Inhibitory Effects of Mediterranean Sponge Extracts and Metabolites on Larval Settlement of the Barnacle Balanus amphitrite
AUTHOR(S):	Hellio, Claire; Tsoukatou, Maria; Marechal, Jean-Philippe; Aldred, Nick; Beaupoil, Claude; Clare, Anthony S.; Vagias, Constantinos; Roussis, Vassilios
CORPORATE SOURCE:	School of Marine Science and Technology, Newcastle University, Newcastle upon Tyne, NE1 7RU, UK
SOURCE:	Marine Biotechnology (2005), 7(4), 297-305 CODEN: MABIFW; ISSN: 1436-2228
PUBLISHER:	Springer Science+Business Media, Inc.
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB One of the most promising alternative technologies to antifouling paints based on heavy metals is the development of coatings whose active ingredients are compds. naturally occurring in marine organisms. This approach is based on the problem of epibiosis faced by all marine organisms and the fact that a great number of them cope with it successfully. The present study investigated the antifouling activity of a series of exts. and secondary metabolites from the epibiont-free Mediterranean sponges Ircinia oros, I. spinosula,

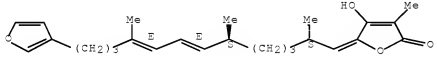
Cacospongia scalaris, Dysidea sp., and Hippospongia communis. Antifouling efficacy was evaluated by the settlement inhibition of laboratory-reared Balanus amphitrite Darwin cyprids. The most promising activity was exhibited by the metabolites 2-[24-acetoxy]-octaprenyl-1-4-hydroquinone, dihydrofurospongin II, and the alc. extract of Dysidea sp.

IT 37905-12-7, Fasciculatin
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(inhibitory effects of Mediterranean sponge exts. and metabolites on larval settlement of barnacle Balanus amphitrite)

RN 37905-12-7 CAPLUS

CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523439 CAPLUS Full-text
DOCUMENT NUMBER: 143:65320
TITLE: GSK-3 inhibitors isolated from marine organisms
INVENTOR(S): Alonso Gordillo, Diana; Dorronsoro Diaz, Isabel; Martinez Gil, Ana; Panizo del Pliego, Gema; Fuertes Huerta, Ana; Perez Puerto, Ma Jose; Martin Aparicio, Ester; Perez Navarro, Dario; Medina Padilla, Miguel
PATENT ASSIGNEE(S): Neuropharma, S. A., Spain; Ruffles, Graham Keith
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054221	A1	20050616	WO 2004-GB50033	20041202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1689730	A1	20060816	EP 2004-819730	20041202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

US 20070088080 A1 20070419 US 2006-596188 20060914
PRIORITY APPLN. INFO.: GB 2003-27908 A 20031202
WO 2004-GB50033 W 20041202

OTHER SOURCE(S): MARPAT 143:65320

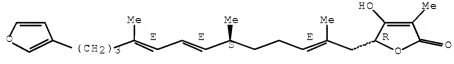
AB The present invention provides the use of a compound, e.g., palinurin, tricantin, in the preparation of a medicament for the treatment of a disease requiring a GSK-3 inhibitor. Also provided are methods of treating chronic neurodegenerative conditions. Palinurin and tricantin were isolated from Ircinia dendroides and their structures were determined

IT 71947-64-3 853885-55-9, Tricantin
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(GSK-3 inhibitors from marine organisms)

RN 71947-64-3 CAPLUS

CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

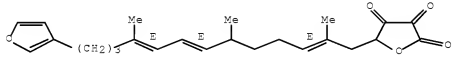
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 853885-55-9 CAPLUS

CN 2,3,4(5H)-Furantrione, [(2E,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.

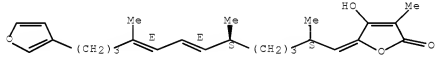


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:318171 CAPLUS Full-text
DOCUMENT NUMBER: 142:423318
TITLE: Cytotoxicity and inhibition of lymphocyte proliferation of fasciculatin, a linear furanosesterterpene isolated from Ircinia variabilis collected from the Atlantic Coast of Morocco
AUTHOR(S): Rifai, Saida; Fassouane, Aziz; Pinho, Paulo M.; Kijjoa, Anake; Nazareth, Nair; Sao, Maria; Nascimento, Jose; Herz, Werner
CORPORATE SOURCE: Faculte des Sciences, Universite Chouaeib Doukkali, El Jadida, Macau
SOURCE: Marine Drugs (2005), 3(1), 15-21
CODEN: MDARE6; ISSN: 1660-3397

URL: http://www.mdpi.net/marinedrugs/papers/md301009.pdf
PUBLISHER: MDPI Center
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
AB Fasciculatin, a furanosesterterpene isolated from the marine sponge Ircinia variabilis from the Atlantic Coast of Morocco, has been evaluated for its influence on a mitogen-induced proliferation of human lymphocytes and growth of human tumor cell lines.
IT 37905-12-7P, Fasciculatin
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(fasciculatin isolated from marine sponge Ircinia variabilis dose-dependently inhibited growth in human tumor MCF-7, NCI-H460 and SF-268 cell lines but did not show antiproliferative effect on normal human lymphocyte proliferation)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 12-54 ibib abs hitstr

L11 ANSWER 12 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:156863 CAPLUS Full-text
DOCUMENT NUMBER: 143:53395
TITLE: Antioxidant activity of (8E,13Z,20Z)-strobilinin/(7E,13Z,20Z)-felixinin from a marine sponge Psammocinia sp.
AUTHOR(S): Jiang, Ya Hong; Ryu, Seung-Hee; Ahn, Eun-Young; You, Song; Lee, Burm-Jong; Jung, Jee H.; Kim, Dong-Kyoo
CORPORATE SOURCE: School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China
SOURCE: Natural Product Sciences (2004), 10(6), 272-276
CODEN: NPSCFB; ISSN: 1226-3907
PUBLISHER: Korean Society of Pharmacognosy
DOCUMENT TYPE: Journal
LANGUAGE: English
AB During the course of our screening for bioactive metabolites from marine sponges, EZZ, the inseparable 1:1 mixture of (8E,13Z,20Z)-strobilinin and (7E,13Z,20Z)-felixinin has been found to deliver significant cytotoxicity against some cancer cell lines. In this study, the antioxidant activity of EZZ was first time evaluated by a series of antioxidant assays. It was found that EZZ was weak in scavenging the stable free radical 1,1-diphenyl-2-picrylhydrazyl (DPPH), but it was comparable to ascorbic acid in scavenging

ABTS and superoxide radicals. In addition, EZZ could protect DNA from hydroxyl radical-induced strand cleavage. The findings of the present study suggest that EZZ possess certain antioxidant activity, which might help to prevent occurrence of cancer by alleviating the oxidative stress in cells.

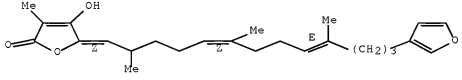
IT 158252-27-8

RL: PAC (Pharmacological activity); BIOL (Biological study)
(antioxidant activity of (8E,13Z,20Z)-strobilinin/(7E,13Z,20Z)-felixinin from a marine sponge Psammocinia sp.)

RN 158252-27-8 CAPLUS

CN 2(5H)-Furanone, 5-[(5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:553525 CAPLUS Full-text

DOCUMENT NUMBER: 141:221979

TITLE: Cytotoxic furanosesterterpenes from a marine sponge Psammocinia sp.

AUTHOR(S): Choi, Kyutaek; Hong, Jongki; Lee, Chong-O.; Kim, Dong-kyoo; Sim, Chung Ja; Im, Kwang Sik; Jung, Jee H.

CORPORATE SOURCE: College of Pharmacy, Pusan National University, Pusan, 609-735, S. Korea

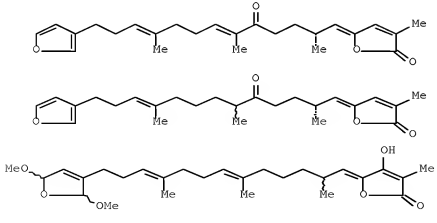
SOURCE: Journal of Natural Products (2004), 67(7), 1186-1189
CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

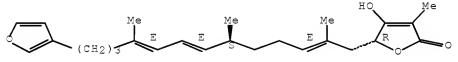


AB Three new (I–III) and seven known cytotoxic furanosesterterpenes were isolated from a marine sponge Psammocinia sp. by bioactivity-guided fractionation. The structures were established on the basis of NMR and MS analyses. The geometry and absolute configuration were determined on the basis of optical rotation, NMR, and CD data. These compds. were evaluated for cytotoxicity against a small panel of five human tumor cell lines, and most of the compds. showed toxicity to SK-MEL-2. The mixture of compds. (8E,13Z,18R,20Z)-strobilinin and (7E,13Z,18R,20Z)-felixinin displayed significant inhibition of DNA replication and moderate antioxidant profile.

IT 71947-64-3, Palinurin 152340-15-3, Isopalinurin 187106-27-0, (8Z,13Z,18R,20Z)-Strobilinin 187106-44-1, (8E,13Z,18R,20Z)-Strobilinin
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
(cytotoxic furanosesterterpenes from marine sponge Psammocinia sp.)

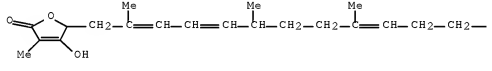
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 152340-15-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,4E,9E)-12-(3-furanyl)-2,6,9-trimethyl-2,4,9-dodecatrien-1-yl]-4-hydroxy-3-methyl- (CA INDEX NAME)

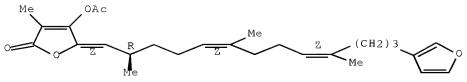
PAGE 1-A



PAGE 1-B

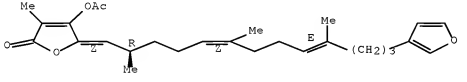
RN 187106-27-0 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 187106-44-1 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

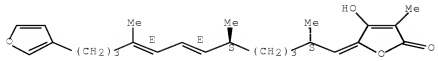
Absolute stereochemistry.
Double bond geometry as shown.



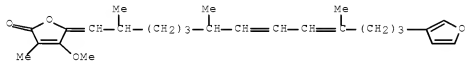
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:911162 CAPLUS Full-text
DOCUMENT NUMBER: 140:160636
TITLE: A new marine metabolite from Isis hippuris and a furanosesterterpene from Aplysilla sulfurea
AUTHOR(S): Chang, Yao-To; Lin, Chung-Ling; Khalil, Ashraf Taha; Shen, Ya Ching
CORPORATE SOURCE: Institute of Marine Resources, National Sun Yat-sen University, Kaohsiung, 80424, Taiwan
SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan) (2003), 55(2), 129-133
CODEN: CPHJEP; ISSN: 1016-1015
PUBLISHER: Pharmaceutical Society of Republic of China
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Chemical investigation of the Formosan gorgonian Isis hippuris (Gorgonaceae) resulted in the isolation of the new compound, 4-hydroxy-5-(p-hydroxyphenyl)pentane-2,5-dione. Investigation of the marine sponge Aplysilla sulfurea Schulze (Aplysillidae) led to the isolation of the linear furanosesterterpene, fasciculatin. The compds. were identified on the basis of extensive spectral studies, especially 2 D NMR.
IT 37905-12-7, Fasciculatin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(4-hydroxy-5-(p-hydroxyphenyl)-pentane-2,5-dione from Formosan gorgonian Isis hippuris and fasciculatin from marine sponge Aplysilla sulfurea)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

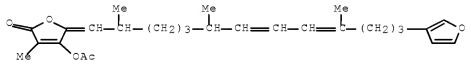
Absolute stereochemistry.
Double bond geometry as described by E or Z.



IT 37867-28-0P, Fasciculatin 22-O-methyl ether 37867-29-1P, Fasciculatin 22-O-acetate
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of)
RN 37867-28-0 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)

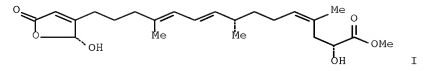


RN 37867-29-1 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-3-methyl- (9CI) (CA INDEX NAME)

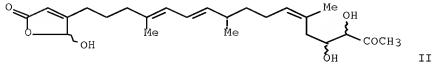


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:827121 CAPLUS Full-text
DOCUMENT NUMBER: 140:2957
TITLE: New cytotoxic sesterterpenoids and norsesterterpenoids from two sponges of the genus Sarcotragus
AUTHOR(S): Liu, Yonghong; Mansoor, Tayyab A.; Hong, Jongki; Lee, Chong-O.; Sim, Chung Ja; Im, Kwang Sik; Kim, Nam Deuk; Jung, Jee H.
CORPORATE SOURCE: College of Pharmacy, Pusan National University, Pusan, 609-735, S. Korea
SOURCE: Journal of Natural Products (2003), 66(11), 1451-1456
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II

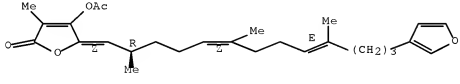
AB New norsesterterpenoids (I and II), a sesterterpenoid, pyrroloterpenoids, and a stereoisomer of kurospongin were isolated, along with known furanosesterterpenes, from two marine sponges of the genus Sarcotragus. The gross structures were established on the basis of NMR and MS anal. The stereochem. was defined by combined use of NMR and CD spectroscopy. The compds. were evaluated for cytotoxicity against five human tumor cell lines and were found to exhibit marginal to moderate activity.

IT 187106-44-1, (8E,13Z,18R,20Z)-Strobilinin 369367-31-7, Sarcotin A 472974-45-1, Episarcotin A
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cytotoxic sesterterpenoids and norsesterterpenoids from sponges of genus Sarcotragus)

RN 187106-44-1 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

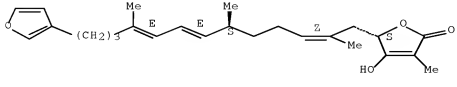
Absolute stereochemistry.
Double bond geometry as shown.



RN 369367-31-7 CAPLUS

CN 2(5H)-Furanone, 5-[(2Z,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5S)- (CA INDEX NAME)

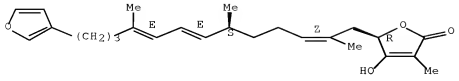
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 472974-45-1 CAPLUS

CN 2(5H)-Furanone, 5-[(2Z,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

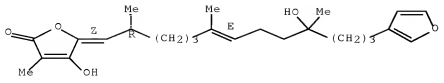
L11 ANSWER 16 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:613027 CAPLUS Full-text
DOCUMENT NUMBER: 140:230823
TITLE: Structures of cytotoxic compounds from the marine organism collected in Ehime prefecture
AUTHOR(S): Kuramoto, Makoto; Fujita, Tohru; Ohno, Osamu; Kawakami, Megumi; Ono, Noboru
CORPORATE SOURCE: Advanced Instrumentation Center for Chemical Analysis, Ehime University, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (2001), 43rd, 473-478
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB In our continuing search, for biol. active substances from such marine organisms, three furanoterpenes (1, 2, 3) and novel alkaloid (4) were isolated from the marine sponge Ircinia sp. collected at Sada Cape. The methanolic extract of Ircinia sp, was extracted with Et acetate. The Et acetate extraction showed cytotoxic activity (IC50 0.02 μg/mL) against the murine leukemia cell line P388. The residue was purified by hexane extraction, SiO2 column chromatog., and HPLC to give cytotoxic compds. (1-4). The structures of these compds. were elucidated mainly by detailed anal. of NMR data and MS spectral data. Polyhalogenated monoterpenes (5,6) were isolated from brown alga Desmarestia ligurata. The structure of 5 was deduced by the detailed comparison with known compds. Interestingly, the result of the optical rotation estimated that 5 was an enantiomer of a known compound These compound showed weak activity against the murine leukemia cell line P388. We reported here the isolation and structural elucidation of these compds.

IT 82124-11-6 667402-98-4
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(structures of cytotoxic compds. from marine sponge and alga)

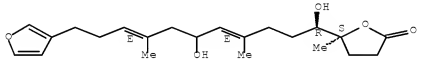
RN 82124-11-6 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



RN 667402-98-4 CAPLUS
CN 2(3H)-Furanone, 5-[(1R,4E,8E)-11-(3-furanyl)-1,6-dihydroxy-4,8-dimethyl-4,8-undecadien-1-yl]dihydro-5-methyl-, (5S)-rel-(+)- (CA INDEX NAME)

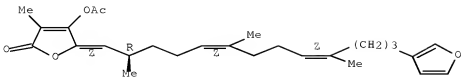
Rotation (+). Absolute stereochemistry unknown.
Double bond geometry as shown.
Currently available stereo shown.



L11 ANSWER 17 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:490483 CAPLUS Full-text
DOCUMENT NUMBER: 140:414
TITLE: Antinociceptive and anti-inflammatory activity in vivo of a variabilin isomer mixture isolated from the marine sponge Ircinia felix
AUTHOR(S): Salama, Ahmed M.; Del Valle, Martha; Vargas, Erika
CORPORATE SOURCE: Facultad de Ciencias, Departamento de Farmacia, Universidad Nacional de Colombia, Bogota, A.A. 14490, Colombia
SOURCE: Revista Colombiana de Ciencias Quimico-Farmaceuticas (2002), 31, 72-76
CODEN: RCQFAQ; ISSN: 0034-7418
PUBLISHER: Universidad Nacional de Colombia, Facultad de Ciencias, Departamento de Farmacia
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Using the carrageenan-induced rat's paw edema method, variabilin isomer mixture previously isolated from the marine sponge Ircinia felix, showed anti-inflammatory activity. Mean while the antinociceptive activity was confirmed by the writhings test induced by i.p. injection of acetic acid in mice. The results showed a high antinociceptive activity and a moderate anti-inflammatory activity in doses of 150 and 200 mg/kg by oral administration, in comparison with the observed activity of the standard substances in the evaluated doses.
IT 187106-27-0 187106-44-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antinociceptive and antiinflammatory activity of variabilin isomer mixture isolated from Ircinia felix)
RN 187106-27-0 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

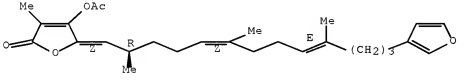
Absolute stereochemistry.

Double bond geometry as shown.



RN 187106-44-1 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:459023 CAPLUS Full-text
DOCUMENT NUMBER: 139:376505
TITLE: Quantitative Assessment of Natural Toxicity in Sponges: Toxicity Bioassay Versus Compound Quantification
AUTHOR(S): Marti, Ruth; Fontana, Angelo; Uriz, Maria-J.; Cimino, Guido
CORPORATE SOURCE: Carretera d'Acces a la Cala Sant Francesc, Centre d'Estudis Avancats de Blanes (CSIC), Girona, E-17300, Spain
SOURCE: Journal of Chemical Ecology (2003), 29(6), 1307-1318
CODEN: JCECD8; ISSN: 0098-0331
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Microtox assay was used to assess the natural toxicity of two sponges, Dysidea avara and Ircinia variabilis. The activity of crude exts. and major metabolites were compared. Methanol extract of D. avara was more toxic than that of acetone and was as toxic as pure avarol, thus suggesting that the toxicity of the sponge was mainly due to this metabolite. The authors also quantified palinurin, the major metabolite of I. variabilis, in specimens from several habitats. With the same methanol exts. used for palinurin quantification, the authors ran the Microtox assay and found a pos. significant regression between toxicity and concentration of this metabolite. Pure palinurin was tested at the same concentration present in the extract, and the toxicity recorded was higher than that of the methanol extract As with avarol from D. avara, palinurin is the main secondary metabolite that confers toxicity to I. variabilis. The results confirm that the standardized Microtox assay is an accurate and reproducible tool for assessing the toxicity of crude exts. and pure metabolites of marine organisms. These results also suggest

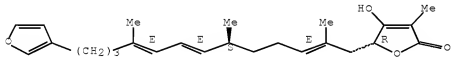
that methanol is more suitable than acetone for the detection of species toxicity by Microtox. The method is faster and easier to perform than chemical quantification even when the sponge chemical is known, and is appropriate for studies on variation in natural toxicity over a range of environmental conditions.

IT 71947-64-3, Palinurin
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (quant. assessment of natural toxicity in sponges employing the Microtox bioassay vs. compound quantification)

RN 71947-64-3 CAPLUS

CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:690995 CAPLUS Full-text

DOCUMENT NUMBER: 137:307647

TITLE: Does the odor from sponges of the genus Ircinia protect them from fish predators?

AUTHOR(S): Pawlik, Joseph R.; McFall, Greg; Zea, Sven

CORPORATE SOURCE: Biological Sciences and Center for Marine Science Research, University of North Carolina at Wilmington, Wilmington, NC, 28403-3297, USA

SOURCE: Journal of Chemical Ecology (2002), 28(6), 1103-1115
CODEN: JCECD8; ISSN: 0098-0331

PUBLISHER: Kluwer Academic/Plenum Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

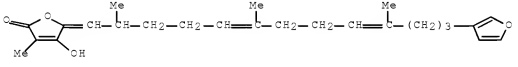
AB Caribbean sponges of the genus Ircinia contain high concns. of linear furanosesterterpene tetronic acids (FTAs) and produce and exude low mol.-weight volatile compds. (e.g., di-Me sulfide, Me isocyanide, Me isothiocyanate) that give these sponges their characteristic unpleasant garlic odor. It has recently been suggested that FTAs are unlikely to function as antipredatory chemical defenses, and this function may instead be attributed to bioactive volatiles. We tested crude organic exts. and purified fractions isolated from Ircinia campana, I. felix, and I. strobilina at naturally occurring concns. in laboratory and field feeding assays to determine their palatability to generalist fish predators. We also used a qual. technique to test the crude volatile fraction from I. felix and I. strobilina and dimethylsulfide in laboratory feeding assays. Crude organic exts. of all three species deterred feeding of fishes in both aquarium and field expts. Bioassay-directed fractionation resulted in the isolation of the FTA fraction as the sole active fraction of the nonvolatile crude extract for each species, and further assays of subfractions suggested that feeding deterrent activity is shared by the FTAs. FTAs deterred fish feeding in aquarium assays at concns. as low as 0.5 mg/mL (fraction B, variabilin), while the natural concns. of combined FTA fractions were > 5.0 mg/mL for all three species. In contrast, natural mixts. of volatiles transferred from sponge tissue to food

pellets and pure dimethylsulfide incorporated into food pellets were readily eaten by fish in aquarium assays. Although FTAs may play other ecol. roles in Ircinia spp., these compds. are effective as defenses against potential predatory fishes. Volatile compds. may serve other defensive functions (e.g., antimicrobial, antifouling) but do not appear to provide a defense against fish predators.

IT 56394-06-0, Strobilinin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(furanosesterterpene tetronic acids from sponges of genus Ircinia protect them from fish predators)

RN 56394-06-0 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:624706 CAPLUS Full-text

DOCUMENT NUMBER: 137:307566

TITLE: Cytotoxic pyrrolo- and furanoterpenoids from the sponge Sarcotragus species

AUTHOR(S): Liu, Yonghong; Hong, Jongki; Lee, Chong-O.; Im, Kwang Sik; Kim, Nam Deuk; Choi, Jae Sue; Jung, Jee H.

CORPORATE SOURCE: College of Pharmacy, Pusan National University, Pusan, 609-735, S. Korea

SOURCE: Journal of Natural Products (2002), 65(9), 1307-1314
CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

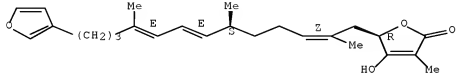
AB Reexamn. of the configuration of sarcotins A-C, first isolated from the marine sponge Sarcotragus sp., revealed that the proposed stereochem. of the tetronic acid moiety needs to be revised as shown in (I-III). Addnl. new pyrrolosesterterpenes (e.g. IV), furanosesterpene derivs., and furanoterpenoids, including two trinorsesterterpenes and two diterpenes, were isolated from the same sponge by bioactivity-guided fractionation. The planar structures were established on the basis of NMR and MS anal. The stereochem. was defined by combined use of NMR, CD spectroscopy, and chemical degradation The compds. were evaluated for cytotoxicity against five human tumor cell lines and were found to exhibit moderate to significant activity.

IT 472974-45-1P, epi-Sarcotin A 472974-85-9P, Sarcotin M
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence);

PREP (Preparation)
(cytotoxic pyrrolo- and furanoterpenoids from sponge Sarcotragus species)

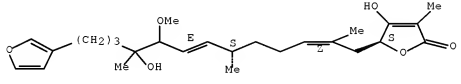
RN 472974-45-1 CAPLUS
CN 2(5H)-Furanone, 5-[(2Z,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 472974-85-9 CAPLUS
CN 2(5H)-Furanone, 5-[(2Z,6S,7E)-13-(3-furanyl)-10-hydroxy-9-methoxy-2,6,10-trimethyl-2,7-tridecadien-1-yl]-4-hydroxy-3-methyl-, (5S)- (CA INDEX NAME)

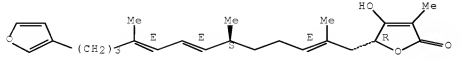
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



IT 71947-64-3 369367-32-8, Sarcotin B
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(stereoupdate of)

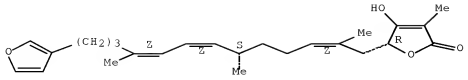
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 369367-32-8 CAPLUS
CN 2(5H)-Furanone, 5-[(2Z,6S,7Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

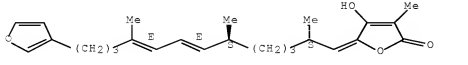
Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:820550 CAPLUS Full-text
DOCUMENT NUMBER: 136:82893
TITLE: Chemical studies of porostome nudibranchs: comparative and ecological aspects
AUTHOR(S): Gavagnin, Margherita; Mollo, Ernesto; Calado, Goncalo; Fahey, Shireen; Ghiselin, Michael; Ortea, Jesus; Cimino, Guido
CORPORATE SOURCE: Istituto per la Chimica di Molecole di Interesse Biologico, CNR, Arco Felice, 6-80072, Italy
SOURCE: Chemoecology (2001), 11(3), 131-136
CODEN: CHMOE9; ISSN: 0937-7409
PUBLISHER: Birkhaeuser Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Three porostome nudibranchs, Dendrodoris krebsii from Mexico, Doriopsilla albopunctata from California and Doriopsilla areolata from Portugal, have been chemical investigated. The presence of sesquiterpenes of the drimane class in these mollusks has been confirmed. In addition, these species have shown to contain sesquiterpenes of ent-pallescensin-A (or pallescensin-A) series, co-occurring with drimane metabolites. Most of these sesquiterpenes are typical sponge metabolites, suggesting a dietary origin in the mollusks, even though de novo biosynthesis, rigorously demonstrated for some Dendrodoris mollusks, may occur.
IT 37905-12-7, Fasciculatin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sesquiterpenes in porostome nudibranchs)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

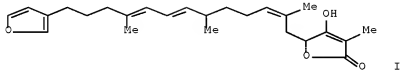
Absolute stereochemistry.
Double bond geometry as described by E or Z.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:658166 CAPLUS Full-text
DOCUMENT NUMBER: 135:329369

TITLE: New cytotoxic sesterterpenes from the sponge Sarcotragus species
AUTHOR(S): Liu, Yonghong; Bae, Bok Hee; Alam, Naseer; Hong, Jongki; Sim, Chung Ja; Lee, Chong-O.; Im, Kwang Sik; Jung, Jee H.
CORPORATE SOURCE: College of Pharmacy, Pusan National University, Pusan, 609-735, S. Korea
SOURCE: Journal of Natural Products (2001), 64(10), 1301-1304
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



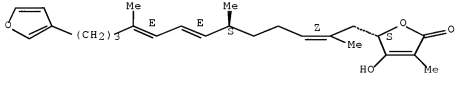
I

AB Five new (e.g. I, sarcotin A) and two known furanosesterterpene tetronic acids were isolated from the marine sponge Sarcotragus sp. by bioactivity-guided fractionation. These compds. showed cytotoxicity against a panel of five human tumor cell lines. The gross structures were established on the basis of NMR and MS analyses. The compds. showed interesting variations of geometry and absolute configuration.

IT 369367-31-7P, Sarcotin A 369367-32-8P, Sarcotin B
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(cytotoxic sesterterpenes from sponge Sarcotragus species)

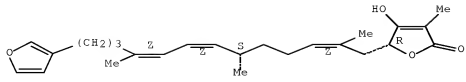
RN 369367-31-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2Z,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 369367-32-8 CAPLUS
CN 2(5H)-Furanone, 5-[(2Z,6S,7Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

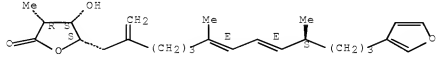
Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

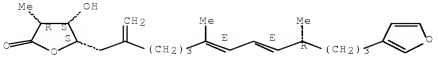
L11 ANSWER 23 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:726347 CAPLUS Full-text
DOCUMENT NUMBER: 134:71395
TITLE: Total synthesis of marine natural products driven by novel structure, potent biological activity, and/or synthetic methodology
AUTHOR(S): Romo, D.; Rzasa, R. M.; Schmitz, W. D.; Yang, J.; Cohn, S. T.; Buchler, I. P.; Shea, H. A.; Park, K.; Langenhan, J. M.; Messerschmidt, N. B.; Cox, M. M.
CORPORATE SOURCE: Department of Chemistry, Texas A and M University, College Station, TX, 77842-3012, USA
SOURCE: Ernst Schering Research Foundation Workshop (2000), 32(Role of Natural Products in Drug Discovery), 103-148
CODEN: ESRWEL; ISSN: 0947-6075
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 145 refs. on the synthesis of bioactive marine natural products. Total synthesis for the potent immunosuppressive thiazole-containing macrodiolide, (-)-pateamine A, (8S and 8R,21S,22S,23R)-okinonellins B, and the potent marine toxin (-)-gymnodimine are discussed.
IT 204577-61-7P 204577-64-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 204577-61-7 CAPLUS
CN 2(3H)-Furanone, 5-[(6E,8E,10S)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadien-1-yl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 204577-64-0 CAPLUS
CN 2(3H)-Furanone, 5-[(6E,8E,10R)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadien-1-yl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



REFERENCE COUNT: 115 THERE ARE 115 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

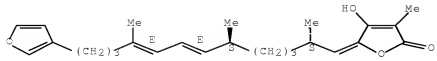
L11 ANSWER 24 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:415232 CAPLUS Full-text
DOCUMENT NUMBER: 133:275922
TITLE: Antiproliferative effects of compounds derived from plants of northeast Brazil
AUTHOR(S): Pessoa, C.; Silveira, E. R.; Lemos, T. L. G.; Wetmore, L. A.; Moraes, M. O.; Leyva, A.
CORPORATE SOURCE: Department of Physiology and Pharmacology, Federal University of Ceara, Fortaleza, 60430-270, Brazil
SOURCE: Phytotherapy Research (2000), 14(3), 187-191
CODEN: PHYREH; ISSN: 0951-418X
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ten compds. derived from plants indigenous to Northeast Brazil were examined for antiproliferative effects on human cells in vitro. The effects of these phytochems. on cell growth were determined by the MTT microtiter assay with 3-day continuous drug exposure. Three human cell lines were used: CEM leukemia, SW1573 lung tumor and CCD922 normal skin fibroblasts. Four active compds. were found with IC50 values less than 10 μg/mL in the two cancer cell lines. Oncocalyxones A and C, both 1,4-anthracenediones from Auxemma oncocalyx (Boraginaceae), showed cytotoxicity with mean IC50 values of 0.8-2, 7-8 and 12-13 μg/mL against CEM, SW1573 and CCD922, resp. One diterpene and one flavonoid, both from Egletes viscosa (Compositae), were also active. 12-Acetoxy-hautriwaic acid lactone was cytotoxic with mean IC50 values of 6, 10 and 10 μg/mL, resp. 4,5-Dihydroxy-3,3,7,8-tetramethoxy flavone (ternatin) was only growth-inhibitory with mean IC50 values of 2, 1 and 10 μg/mL, resp. These four most active compds. were examined further for their effects on DNA integrity and on DNA synthesis. All but ternatin caused substantial DNA damage and marked inhibition of 5-bromo-2'-deoxyuridine incorporation within 24 h. This study demonstrated the antiproliferative activity of four novel phytochems., three of which are DNA-reactive and inhibit DNA synthesis. Further studies are warranted to evaluate these compds. for antitumor potential.

IT 37905-12-7, Fasciculatin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiproliferative effects of compds. derived from plants of northeast Brazil)

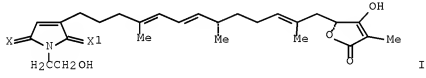
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

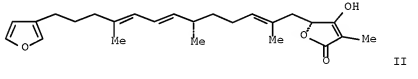


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:754616 CAPLUS Full-text
DOCUMENT NUMBER: 132:93491
TITLE: The Biocatalytic Transformation of Furan to Amide in the Bioactive Marine Natural Product Palinurin
AUTHOR(S): El Sayed, Khalid A.; Mayer, Alejandro M. S.; Kelly, Michelle; Hamann, Mark T.
CORPORATE SOURCE: Department of Pharmacognosy and Research Institute of Pharmaceutical Sciences (NCNPR) School of Pharmacy, The University of Mississippi, University, MS, USA
SOURCE: Journal of Organic Chemistry (1999), 64(25), 9258-9260
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:93491
GI



I



II

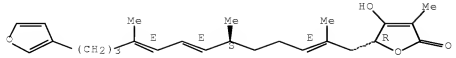
AB Palinurine A (I, X = H2, X1 = O) and palinurine B (I, X = O, X1 = H2) were obtained by biocatalytic transformation of palinurin (II) by Cunninghamella sp. NRRL 5695 in a preparative scale fermentation This transformation is certain to have applications in synthetic chemical The compds. were evaluated for antibacterial and antifungal activity.

IT 71947-64-3, Palinurin
RL: RCT (Reactant); RACT (Reactant or reagent)
(biocatalytic transformation of furan to amide in bioactive marine natural product palinurin)

RN 71947-64-3 CAPLUS

CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

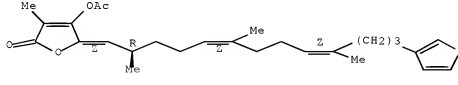
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:407826 CAPLUS Full-text
DOCUMENT NUMBER: 132:33426
TITLE: (8Z,13Z,18R,20Z)-strobilinin and (7Z,13Z,18R,20Z)-felixinin: new bioactive furanosesterterpene tetronic acids from marine sponges of the genus Ircinia
AUTHOR(S): Martinez, Alejandro; Duque, Carmenza; Sato, Naoko; Fujimoto, Yoshinori
CORPORATE SOURCE: Departamento de Quimica, Universidad Nacional de Colombia, Bogota, Colombia
SOURCE: Natural Product Analysis: Chromatography, Spectroscopy, Biological Testing, [Symposium], Wuerzburg, Germany, Sept. 1997 (1998), Meeting Date 1997, 381-383. Editor(s): Schreier, Peter. Vieweg: Wiesbaden, Germany.
CODEN: 67USA7
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Antimicrobial furanosesterterpene tetronic acids are isolated from Ircinia felix, Ircinia strobilina and Ircinia campana.
IT 187106-27-0P, (8Z,13Z,18R,20Z)-Strobilinin
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(isolation of antimicrobial (8Z,13Z,18R,20Z)-strobilinin and (7Z,13Z,18R,20Z)-felixinin from marine sponges of genus Ircinia)
RN 187106-27-0 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

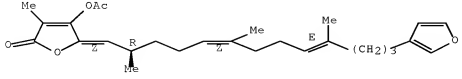
Absolute stereochemistry.
Double bond geometry as shown.



IT 187106-44-1P, (8E,13Z,18R,20Z)-Strobilinin
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(isolation of antimicrobial (8Z,13Z,18R,20Z)-strobilinin and (7Z,13Z,18R,20Z)-felixinin from marine sponges of genus Ircinia)
RN 187106-44-1 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

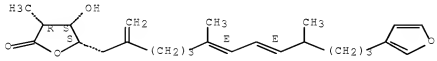
Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

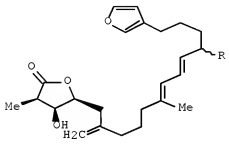
L11 ANSWER 27 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:578465 CAPLUS Full-text
DOCUMENT NUMBER: 130:14102
TITLE: A β-lactone-based strategy applied to the total synthesis of okinonellin B; Stille couplings of 2-bromothiazolines with organostannanes
AUTHOR(S): Schmitz, William Douglas
CORPORATE SOURCE: Texas A and M Univ., College Station, TX, USA
SOURCE: (1998) 199 pp. Avail.: UMI, Order No. DA9830978 From: Diss. Abstr. Int., B 1998, 59(4), 1658
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Unavailable
IT 107585-45-5P, Okinonellin B
RL: SPN (Synthetic preparation); PREP (Preparation)
(β-lactone-based strategy applied to the total synthesis of okinonellin B; Stille couplings of 2-bromothiazolines with organostannanes)
RN 107585-45-5 CAPLUS
CN 2(3H)-Furanone, 5-[(6E,8E)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadienyl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.
Double bond geometry as shown.

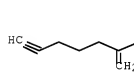


L11 ANSWER 28 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:169776 CAPLUS Full-text
DOCUMENT NUMBER: 128:230540
ORIGINAL REFERENCE NO.: 128:45667a,45670a
TITLE: β-Lactone Based Strategy Applied to the Total Synthesis of (8S,21S,22S,23R)- and (8R,21S,22S,23R)-Okinonellin B
AUTHOR(S): Schmitz, William D.; Messerschmidt, N. Brian; Romo,

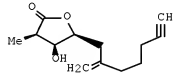
Daniel
CORPORATE SOURCE: Department of Chemistry, Texas A and M University, College Station, TX, 77843-3012, USA
SOURCE: Journal of Organic Chemistry (1998), 63(7), 2058-2059
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 128:230540
GI



I



II



III

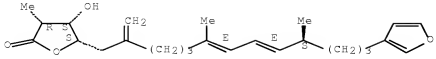
AB A unique β-lactone based strategy was applied to the first total syntheses of (8S,21S,22S,23R)-okinonellin B (I, R = α-Me) and (8R,21S,22S,23R)-okinonellin B (I, R = β-Me). The syntheses demonstrated the utility of β-lactones in natural product synthesis and specifically their use for the synthesis of highly substituted and functionalized butyrolactones. A two-step procedure efficiently and stereoselectively converted the chiral aldehyde II to the all-syn butyrolactone III. The synthetic sequence employed a tandem Mukaiyama aldol-lactonization and a tandem debenzylation-transacylation reaction as key steps.

IT 204577-61-7P, (8S,21S,22S,23R)-Okinonellin B 204577-64-0P, (8R,21S,22S,23R)-Okinonellin B
RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of (8S,21S,22S,23R)- and (8R,21S,22S,23R)-okinonellin B via a tandem aldol-lactonization, debenzylation-transacylation and carboalumination)

RN 204577-61-7 CAPLUS

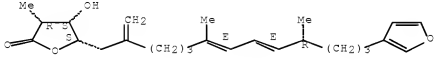
CN 2(3H)-Furanone, 5-[(6E,8E,10S)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadien-1-yl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



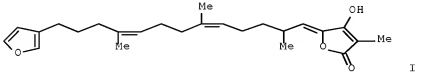
RN 204577-64-0 CAPLUS
CN 2(3H)-Furanone, 5-[(6E,8E,10R)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadien-1-yl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:496820 CAPLUS Full-text
DOCUMENT NUMBER: 127:133492
ORIGINAL REFERENCE NO.: 127:25697a,25700a
TITLE: Two new sesterterpene tetronic acids from the marine sponge Ircinia oros
AUTHOR(S): Hoeller, Ulrich; Koenig, Gabriele M.; Wright, Anthony D.
CORPORATE SOURCE: Institute for Pharmaceutical Biology, Technical University of Braunschweig, Braunschweig, D-38106, Germany
SOURCE: Journal of Natural Products (1997), 60(8), 832-835
CODEN: JNPRDF; ISSN: 0163-3864
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

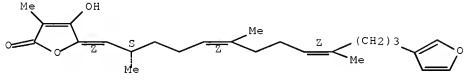


I

AB Two new sesterterpene tetronic acids, (8Z,13Z,18S,20Z)-strobilinin (I) and (7E,12Z,18S,20Z)-variabilin, together with the known compds. (7E,12E,18S,20Z)-variabilin, (7E,13Z,18S,20Z)-variabilin, and (7Z,12Z,20Z)-variabilin, have been isolated from the sponge Ircinia oros as their 22-O-Me derivs. The structures of all compds. were determined by spectroscopic methods, mainly 1D and 2D NMR methodologies.

IT 193001-60-4P, (8Z,13Z,18S,20Z)-Strobilinin
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(sesterterpene tetronic acid isolation and structural characterization from marine sponge Ircinia oros)
RN 193001-60-4 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

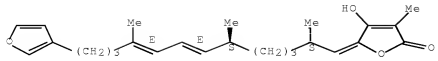
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

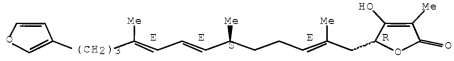
L11 ANSWER 30 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:318011 CAPLUS Full-text
DOCUMENT NUMBER: 127:92867
ORIGINAL REFERENCE NO.: 127:17813a,17816a
TITLE: Palinurin and fasciculatin sulfates from two thyrrenean sponges of the genus Ircinia
AUTHOR(S): De Rosa, S.; De Giulio, A.; Crispino, A.; Iodice, C.; Tommonaro, G.
CORPORATE SOURCE: Istituto Chimica Molecole Interesse Biologico, Naples, I-80072, Italy
SOURCE: Natural Product Letters (1997), 10(1), 7-12
CODEN: NPLEEF; ISSN: 1057-5634
PUBLISHER: Harwood
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Together with the previously described palinurin and fasciculatin, the corresponding sulfates were isolated from sponges of the genus Ircinia, collected in the Thyrrenean Sea. The structural elucidation and biol. activity of these compds. are reported.
IT 37905-12-7P, Fasciculatin 71947-64-3P, Palinurin 192066-73-2P, Palinurin sulfate 192066-74-3P, Fasciculatin sulfate
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(palinurin and fasciculatin sulfates isolation and structural characterization and toxicity from marine sponge)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



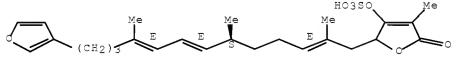
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



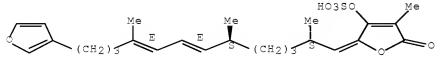
RN 192066-73-2 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-3-methyl-4-(sulfooxy)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



RN 192066-74-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadien-1-ylidene]-3-methyl-4-(sulfooxy)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.
Currently available stereo shown.



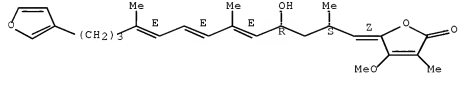
L11 ANSWER 31 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:198086 CAPLUS Full-text
DOCUMENT NUMBER: 126:186225
ORIGINAL REFERENCE NO.: 126:35965a,35968a
TITLE: Total Synthesis of (-)-Irciniania and (+)-Wistarin
AUTHOR(S): Uenishi, Jun'ichi; Kawahama, Reiko; Yonemitsu, Osamu
CORPORATE SOURCE: Department of Chemistry, Okayama University of

Science, Okayama, 700, Japan
SOURCE: Journal of Organic Chemistry (1997), 62(6), 1691-1701
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 126:186225
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB (-)-Ircinianin [I; R1 = R2 = H (II)], a cyclic furanosesterterpenetetronic acid isolated from a marine sponge (genus Ircinia), is synthesized in 17 steps from (S)-2-methylpropane-1,3-diol mono THP ether and 3-furfural. The key step involves a NiCl2-CrCl2-mediated coupling reaction of iodotriene III with chiral aldehyde IV in DMSO and subsequent intramol. Diels-Alder reaction in one pot. Both reactions proceed very smoothly at room temperature and eventually give the cyclic product I (R1 = OH, R2 = Me) possessing the desired cyclic skeleton of II in 60% yield. The structure of I (R1 = OH, R2 = Me) is determined by X-ray crystallog. anal. The stereochem. of Diels-Alder reactions of tetraene V (α-OH) and another acyclic precursor V (β-OH) are discussed. The first total synthesis of (+)-wistarin (VI; R3 = H, R4 = α-Me) is accomplished in 55% yield by iodo ether ring formation of II and hydrogenolysis of the iodide VI (R3 = iodo, R4 = α-Me). Based on the coupling constant in the proton NMR spectrum of VI (R3 = iodo, R4 = α-Me), the reported structure for (+)-wistarin is revised to VI (R3 = H, R4 = α-Me).
IT 187458-23-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(asym. total synthesis of irciniania and wistarin via tandem coupling-Diels-Alder reactions)
RN 187458-23-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,4R,5E,7E,9E)-13-(3-furanyl)-4-hydroxy-2,6,10-trimethyl-5,7,9-tridecatrien-1-ylidene]-4-methoxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 32 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:81967 CAPLUS Full-text
DOCUMENT NUMBER: 126:236238
ORIGINAL REFERENCE NO.: 126:45649a,45652a
TITLE: (8Z,13Z,20Z)-Strobilinin and (7Z,13Z,20Z)-felixinin: new furanosesterterpene tetronic acids from marine

sponges of the genus Ircinia

AUTHOR(S): Martinez, Alejandro; Duque, Carmenza; Sato, Naoko; Fujimoto, Yoshinori

CORPORATE SOURCE: Dep. Quim., Univ. Nac. Colombia, Bogota, AA14490, Colombia

SOURCE: Chemical & Pharmaceutical Bulletin (1997), 45(1), 181-184
CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

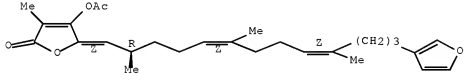
AB Methanolic exts. of the marine sponges Ircinia felix, I. strobilina and I. campana occurring in the Colombian Caribbean afforded similar complex mixts. of antimicrobial furanosesterterpene tetronic acids. Each mixture was acetylated and then fractionated by HPLC, GC, GC-MS and NMR analyses of the HPLC fractions revealed the novel (8Z,13Z,20Z)-strobilinin and (7Z,13Z,20Z)-felixinin, together with the known (8E,13Z,20Z)-strobilinin, (7E,13Z,20Z)-felixinin and (7E,12E,18R,20Z)-variabilin.

IT 187106-27-0P, (8Z,13Z,18R,20Z)-Strobilinin acetate
187106-44-1P, (8E,13Z,18R,20Z)-Strobilinin acetate
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(strobilinin and felixinin isolation and structural characterization and antimicrobial activity from marine sponge)

RN 187106-27-0 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9Z)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

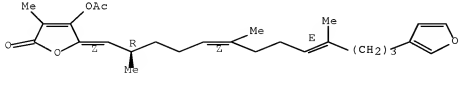
Absolute stereochemistry.
Double bond geometry as shown.



RN 187106-44-1 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[(2R,5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-3-methyl-, (5Z)- (CA INDEX NAME)

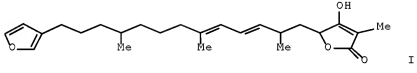
Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 33 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:972742 CAPLUS Full-text
DOCUMENT NUMBER: 124:25880
ORIGINAL REFERENCE NO.: 124:4903a,4906a
TITLE: A new sesterterpene tetronic acid from an Australian marine sponge, Psammocinia sp.
AUTHOR(S): Murray, Leanne; Hamit, Hasan; Hooper, John N. A.; Hobbs, Lisa; Capon, Robert J.
CORPORATE SOURCE: School Chemistry, University Melbourne, Parkville, 3052, Australia
SOURCE: Australian Journal of Chemistry (1995), 48(11), 1899-902
CODEN: AJCHAS; ISSN: 0004-9425
PUBLISHER: Commonwealth Scientific and Industrial Research Organization
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

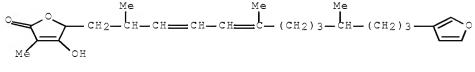


I

AB A new sesterterpene tetronic acid (I) exhibiting antimicrobial activity was isolated from an Australian marine sponge, Psammocinia sp., and its structure secured by detailed spectroscopic anal. The tetronic acid possesses almost identical spectroscopic characteristics to, and is a structural isomer of, a known marine natural product previously reported from an Australian sponge.

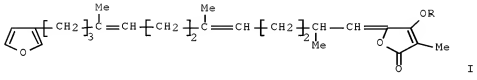
IT 171438-67-8
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(tetronic acid isolation and structural characterization and antimicrobial activity from Australian marine sponge)

RN 171438-67-8 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-3,5-tridecadienyl]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 34 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:631092 CAPLUS Full-text
DOCUMENT NUMBER: 121:231092
ORIGINAL REFERENCE NO.: 121:42151a,42154a
TITLE: Two for one: structure revision of the marine sesterterpene tetronic acid strobilinin to (8Z,13E,20Z)-strobilinin and (8E,13Z,20Z)-strobilinin

AUTHOR(S): Davis, Rohan; Capon, Robert J.
CORPORATE SOURCE: Sch. Chem., Univ. Melbourne, Parkville, 3052, USA
SOURCE: Australian Journal of Chemistry (1994), 47(5), 933-6
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



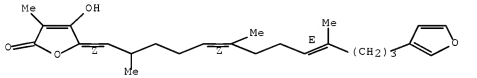
I

AB A reinvestigation of the known marine natural product strobilinin I (R = H) has revealed it not to be a single compound, but to consist of two naturally occurring geometric isomers. (8E,13Z,20Z)- and (8Z,13E,20Z)-strobilinin I (R = Ac) were resolved, characterized, and their structures assigned by spectroscopic anal. It would appear that the absolute stereochem. of the strobilinins is very likely opposite to that of co-occurring variabilin .

IT 158252-27-8, (8E,13Z,20Z)-Strobilinin 158252-28-9, (8Z,13E,20Z)-Strobilinin
RL: PRP (Properties)
(mol. structure of)

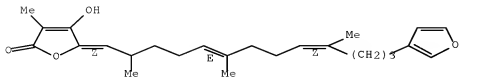
RN 158252-27-8 CAPLUS
CN 2(5H)-Furanone, 5-[(5Z,9E)-13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadien-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



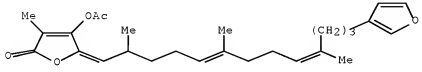
RN 158252-28-9 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-4-hydroxy-3-methyl-, (Z,Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



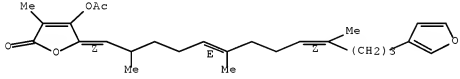
IT 158195-51-8P, (8E,13Z,20Z)-Strobilinin acetate
158252-26-7P, (8Z,13E,20Z)-Strobilinin acetate
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR of)
RN 158195-51-8 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-3-methyl- (9CI) (CA INDEX NAME)

Currently available stereo shown.



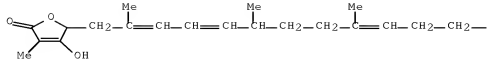
RN 158252-26-7 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-3-methyl-, (Z,Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



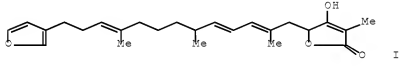
L11 ANSWER 35 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:212978 CAPLUS Full-text
DOCUMENT NUMBER: 120:212978
ORIGINAL REFERENCE NO.: 120:37665a,37668a
TITLE: Isopalinurin: a mild protein phosphatase inhibitor from a southern Australian marine sponge, Dysidea sp. [Erratum to document cited in CA120(9):102473v]
AUTHOR(S): Murray, Leanne; Sim, Alistair T. R.; Mudge, Lisa-Maree; Rostas, John A. P.; Capon, Robert J.
CORPORATE SOURCE: Sch. Chem., Univ. Melbourne, Parkville, 3052, Australia
SOURCE: Australian Journal of Chemistry (1993), 46(11), 1824
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The errors were not reflected in the abstract or the index entries.
IT 152340-15-3
RL: BIOL (Biological study)
(of southern Australian marine sponge, protein phosphatase inhibition by (Erratum))
RN 152340-15-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,4E,9E)-12-(3-furanyl)-2,6,9-trimethyl-2,4,9-dodecatrien-1-yl]-4-hydroxy-3-methyl- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

L11 ANSWER 36 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:102473 CAPLUS Full-text
DOCUMENT NUMBER: 120:102473
ORIGINAL REFERENCE NO.: 120:18027a,18030a
TITLE: Isopalinurin: a mild protein phosphatase inhibitor from a southern Australian marine sponge, Dysidea sp
AUTHOR(S): Murray, Leanne; Sim, Alistair T. R.; Rostas John A. P.; Capon, Robert J.
CORPORATE SOURCE: Sch. Chem., Univ. Melbourne, Parkville, 3052, Australia
SOURCE: Australian Journal of Chemistry (1993), 46(8), 1291-4
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

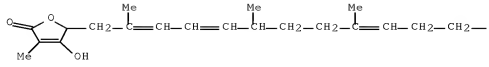
AB A new sesterterpene tetronic acid, isopalinurin (I), has been isolated from an Australian marine sponge, Dysidea sp., collected in Bass Strait. I was identified as the agent responsible for the antibiotic activity and protein phosphatase inhibitory properties exhibited by the crude ethanol extract, and its structure was secured by detailed spectroscopic anal.

IT 152340-15-3, Isopalinurin
RL: BIOL (Biological study)
(of southern Australian marine sponge, protein phosphatase inhibition by)

RN 152340-15-3 CAPLUS

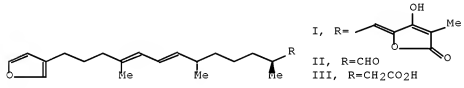
CN 2(5H)-Furanone, 5-[(2E,4E,9E)-12-(3-furanyl)-2,6,9-trimethyl-2,4,9-dodecatrien-1-yl]-4-hydroxy-3-methyl- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

L11 ANSWER 37 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:125143 CAPLUS Full-text
DOCUMENT NUMBER: 116:125143
ORIGINAL REFERENCE NO.: 116:21075a,21076a
TITLE: C20 furanoterpenic aldehydes cooccurring in dictyoceratid sponges with conjugated furanosesterterpenic tetronic acids
AUTHOR(S): Guella, Graziano; Mancini, Ines; N'Diaye, Ibrahima; Pietra, Francesco
CORPORATE SOURCE: Fac. Sci., Univ. Trento, Povo-Trento, 38050, Italy
SOURCE: Tetrahedron Letters (1991), 32(44), 6415-16
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:125143
GI



AB Conjugated sesterterpenic acids, such as I, co-occur in dictyoceratid sponges with the related C20 aldehydes and C21 acids II and III with I in what may be viewed as a novel 5-carbon biogenetic degradation of sesterterpenes, which could be mimicked in H2O2/aqueous dioxane; with nonconjugated sesterterpenic tetronic acids only the C21 acids are present, and the chemical degradation requires a base, too.

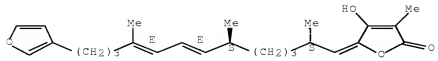
IT 37905-12-7
RL: BIOL (Biological study)
(of dictyoceratid sponge)

RN 37905-12-7 CAPLUS

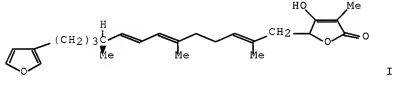
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.



L11 ANSWER 38 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:74185 CAPLUS Full-text
DOCUMENT NUMBER: 112:74185
ORIGINAL REFERENCE NO.: 112:12615a,12618a
TITLE: A new furanosesterpene from the marine sponge Psammocinia rugosa
AUTHOR(S): Liokas, Vicky; Garson, Mary J.; Carver, John A.
CORPORATE SOURCE: Dep. Chem., Univ. Wollongong, Wollongong, 2500, Australia
SOURCE: Australian Journal of Chemistry (1989), 42(10), 1805-11
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



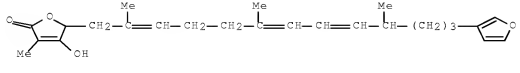
I

AB A tetronic acid (I), with weak antimicrobial activity, was isolated from the sponge Psammocinia and characterized by anal. of 1H and 13C NMR data including 1H-1H correlation (COSY) expts. The compound may be identical to a tetronic acid isolated by the Roche group.

IT 125010-02-8
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of marine sponge, isolation and structure of)

RN 125010-02-8 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-2,6,8-tridecatrienyl]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 39 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:112000 CAPLUS Full-text

DOCUMENT NUMBER: 110:112000
ORIGINAL REFERENCE NO.: 110:18435a,18438a
TITLE: Oxygenated furanosesterterpene tetronic acids from a sponge of the genus Ircinia
AUTHOR(S): Barrow, Colin J.; Blunt, John W.; Munro, Murray H. G.; Perry, Nigel B.
CORPORATE SOURCE: Dep. Chem., Univ. Canterbury, Christchurch, N. Z.
SOURCE: Journal of Natural Products (1988), 51(6), 1294-8
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:112000
GI

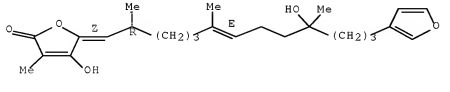
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB After a MeOH/toluene extract of the sponge Ircinia was partitioned between EtOAc and H2O, Si gel chromatog. of the EtOAc partition yielded 3 sesterterpene-containing fractions. The least polar of these contained variabilin (I). The next fraction contained a mixture of keto sesterterpenes II, III, and IV in the ratio 4:2:1, whereas the most polar fraction contained the hydroxy sesterterpenes V and VI. Their structures were identified by UV, IR, 1H and 13C NMR, and mass spectroscopy. Crude exts. of Ircinia showed in vitro antiviral activity against herpes simplex type 1 and polio type 1 virus, with some cytotoxicity to the BSC host cells. Pure I was cytotoxic at 2 μg/disk, but showed varying antiviral effects, whereas 22-O-methylvariabilin was inactive at 20 μg/disk. Parallel results were obtained with V and its 22-O-Me derivative The 22-O-Me derivs. of II, III, and IV were cytotoxic, without antiviral activity, at 2 μg/disk, whereas the 22-O-Me derivative of VI was only marginally cytotoxic at this level.

IT 82124-11-6 119328-94-8 119328-96-0
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge)

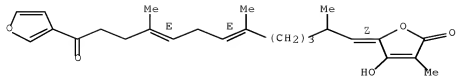
RN 82124-11-6 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



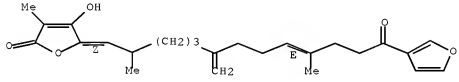
RN 119328-94-8 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-13-oxo-6,9-tridecadienylidene]-4-hydroxy-3-methyl-, (Z,E,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

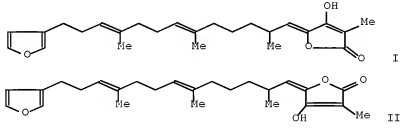


RN 119328-96-0 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,10-dimethyl-6-methylene-13-oxo-9-tridecenylidene]-4-hydroxy-3-methyl-, (Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



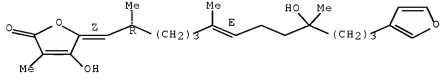
L11 ANSWER 40 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:404104 CAPLUS Full-text
DOCUMENT NUMBER: 109:4104
ORIGINAL REFERENCE NO.: 109:783a,786a
TITLE: Variabilin and related compounds from a sponge of the genus Sarcotragus
AUTHOR(S): Barrow, Colin J.; Blunt, John W.; Munro, Murray H. G.; Perry, Nigel B.
CORPORATE SOURCE: Dep. Chem., Univ. Canterbury, Christchurch, N. Z.
SOURCE: Journal of Natural Products (1988), 51(2), 275-81
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 109:4104
GI



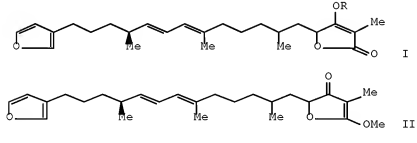
AB The bioactivity-directed anal. of the extract from a sponge of the genus Sarcotragus led to the isolation of a series of bioactive sesterterpenes, of which variabilin (I) was the major component. The sesterterpenes II–IV, along with the related C21 furanoterpene (V), were present in lesser amts. The unequivocal assignment of the stereochem. of the 20,21 double bond in I as 20Z was achieved through examination of the 22-O-Me derivative of I and the isolation of the I isomer II with the 20E configuration.

IT 82124-11-6
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge)
RN 82124-11-6 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



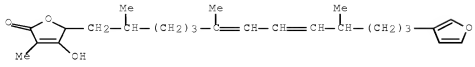
L11 ANSWER 41 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:164817 CAPLUS Full-text
DOCUMENT NUMBER: 108:164817
ORIGINAL REFERENCE NO.: 108:27023a,27026a
TITLE: A new sesterterpene tetronic acid from an Australian sponge, Ircinia sp
AUTHOR(S): Capon, Robert J.; MacLeod, John K.
CORPORATE SOURCE: Res. Sch. Chem., Aust. Natl. Univ., Canberra, 2601, Australia
SOURCE: Australian Journal of Chemistry (1987), 40(7), 1327-30
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



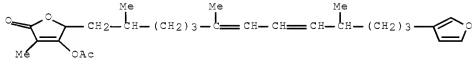
AB A new sesterterpene tetronic acid I (R = H), exhibiting antimicrobial activity, was isolated from an Australian Ircinia species. The structure elucidation was based on detailed spectroscopic anal. of I (R = H, Ac, Me) and II.

IT 113994-72-2
RL: PROC (Process)
(mol. structure and isolation of, from Ircinia sponge)
RN 113994-72-2 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienyl]-4-

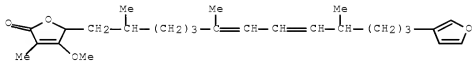
hydroxy-3-methyl- (9CI) (CA INDEX NAME)



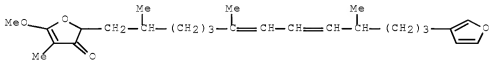
IT 113994-73-3P 113994-74-4P 113994-75-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and carbon-13 NMR of)
RN 113994-73-3 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienyl]-3-methyl- (9CI) (CA INDEX NAME)



RN 113994-74-4 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienyl]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)

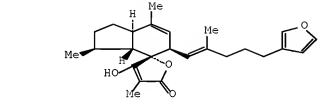


RN 113994-75-5 CAPLUS
CN 3(2H)-Furanone, 2-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienyl]-5-methoxy-4-methyl- (9CI) (CA INDEX NAME)

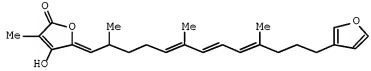


L11 ANSWER 42 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:423539 CAPLUS Full-text
DOCUMENT NUMBER: 107:23539
ORIGINAL REFERENCE NO.: 107:3991a,3994a
TITLE: Synthesis of (±)-ircinianin, a marine sponge sesterterpene
AUTHOR(S): Takeda, Kei; Sato, Masaaki; Yoshii, Eiichi
CORPORATE SOURCE: Fac. Pharm. Sci., Toyama Med. Pharm. Univ., Toyama, 930-01, Japan

SOURCE: Tetrahedron Letters (1986), 27(33), 3903-6
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:23539
GI



I



II

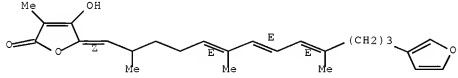
AB A biogenetic-type synthesis of (±)-ircinianin (I) via intramol. Diels-Alder reaction of isoprenoid II is described.

IT 108742-77-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and intramol. Diels-Alder reaction of)

RN 108742-77-4 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,7,9-tridecatrienylidene]-4-hydroxy-3-methyl-, (Z,E,E,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

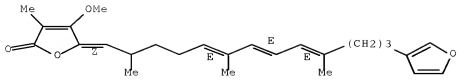


IT 108734-53-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate in preparation of (±)-ircinianin)

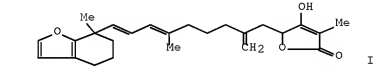
RN 108734-53-8 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,7,9-tridecatrienylidene]-4-methoxy-3-methyl-, (Z,E,E,E)- (9CI) (CA INDEX NAME)

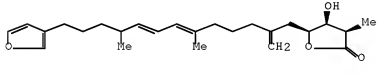
Double bond geometry as shown.



L11 ANSWER 43 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:153373 CAPLUS Full-text
DOCUMENT NUMBER: 106:153373
ORIGINAL REFERENCE NO.: 106:24937a,24940a
TITLE: Okinonellins A and B, two novel furanosesterterpenes, which inhibit cell division of fertilized starfish eggs, from the marine sponge Spongionella sp
AUTHOR(S): Kato, Y.; Fusetani, N.; Matsunaga, S.; Hashimoto, K.
CORPORATE SOURCE: Fac. Agric., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Experientia (1986), 42(11-12), 1299-300
CODEN: EXPEAM; ISSN: 0014-4754
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II

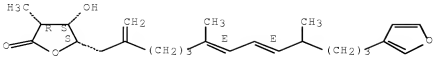
AB Okinellin A (I) and B (II) were isolated from a marine sponge by EtOH extraction followed by chromatog. of the organic phase on silica gel then repeated HPLC purification I and II inhibited cell division by fertilized starfish eggs at 5 μg/mL. The structures of I and II were determined by spectral analyses which included 1H- and 13C-NMR with COSY and NOE expts.

IT 107585-45-5
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of marine sponge, cell division-inhibiting activity and mol. structure of)

RN 107585-45-5 CAPLUS

CN 2(3H)-Furanone, 5-[(6E,8E)-13-(3-furanyl)-6,10-dimethyl-2-methylene-6,8-tridecadienyl]dihydro-4-hydroxy-3-methyl-, (3R,4S,5S)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.
Double bond geometry as shown.



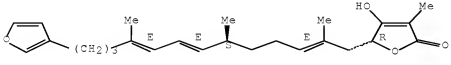
L11 ANSWER 44 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:96126 CAPLUS Full-text
DOCUMENT NUMBER: 106:96126
ORIGINAL REFERENCE NO.: 106:15597a,15600a
TITLE: Aldose reductase inhibitor from Palauan sponges
AUTHOR(S): Nakagawa, Masashi; Ishihama, Misako; Hamamoto, Yoshihiro; Endo, Mamoru
CORPORATE SOURCE: Suntory Inst. Biomed. Res., Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1986), 28th, 200-7
CODEN: TYKYDS
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

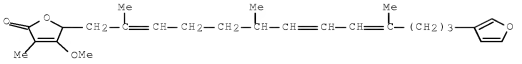
AB Of .apprx.100 Plauan species tested exts. of the sea sponges Dysidea, Ircinia ramosa and Dactylospongia metachromia showed aldose reductase [9028-31-3] inhibitory activities at 400 μg/mL. The active principles were I [80246-24-8], palinurin (II) [71947-64-3], III [106985-41-5], and a new sesquiterpene acid IV [106985-42-6] from Dysidea. These inhibitors can be used in the treatment of galactosemic cataracts. The structure of IV was elucidated spectroscopically.

IT 71947-64-3, Palinurin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(of Palauan sponges, aldose reductase inhibitory activity of)
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



IT 106985-40-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 106985-40-4 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrienyl]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)

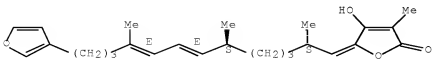


L11 ANSWER 45 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:468478 CAPLUS Full-text
DOCUMENT NUMBER: 103:68478
ORIGINAL REFERENCE NO.: 103:10972h,10973a
TITLE: The chemical defense of nudibranch molluscs. Structure, biosynthetic origin and defensive properties of terpenoids from the dorid nudibranch Dendrodoris grandiflora
AUTHOR(S): Cimino, G.; De Rosa, S.; De Stefano, S.; Morrone, R.; Sodano, G.
CORPORATE SOURCE: Ist. Chim. Mol. Interesse Biol., CNR, Arco Felice, 80072, Italy
SOURCE: Tetrahedron (1985), 41(6), 1093-100
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nudibranch mollusks, apparently defenseless against potential predators, possess secondary metabolites localized on the body wall which help them to escape from predation. These metabolites are largely of dietary origin; in 1 case the biosynthetic ability of a nudibranch to elaborate its own chemical defense has been shown. From the mantle exts. of D. grandiflora polygodial and 6β-acethoxyolepupuane, a new sesquiterpene triacetate, were isolated. These 2 drimane sesquiterpenoids, both endowed with antifeedant properties, are biosynthesized de novo by the nudibranch. Exts. from the digestive glands of the same nudibranch yielded previously known sesquiterpene esters (I), microcionins-1, -2, -3, and -4, fasciculatin, furospongin-1 acetate, a new C-21 furanoterpene, and a mixture of new prenylated chromanols. All these compds., with the exception of I appear to be of dietary origin. The structures of the new compds. were determined by spectral and chemical means.

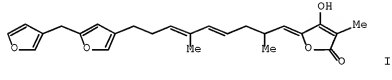
IT 37905-12-7
RL: BIOL (Biological study)
(of hepatopancreas, of nudibranch, antifeedant properties of)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

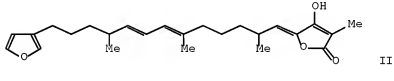


L11 ANSWER 46 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:93256 CAPLUS Full-text

DOCUMENT NUMBER: 102:93256
ORIGINAL REFERENCE NO.: 102:14619a,14622a
TITLE: Bioactive marine metabolites. V. Two new furanosesterterpenes, inhibitors of cell division of the fertilized starfish eggs, from the marine sponge Cacospongia scalaris
AUTHOR(S): Fusetani, N.; Kato, Y.; Matsunaga, S.; Hashimoto, K.
CORPORATE SOURCE: Fac. Agric., Univ. Tokyo, Tokyo, Japan
SOURCE: Tetrahedron Letters (1984), 25(43), 4941-2
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



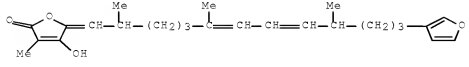
I



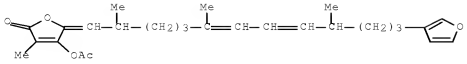
II

AB The ETOH extract of the sponge (C. scalaris) (1.5 kg) was partitioned between CH2Cl2 and H2O and the organic phase purified by silica gel, column chromatog., and HPLC to yield I and II which inhibited cell division by fertilized starfish (Asterina pectinifera) eggs at 1 μg/mL. The structures of I and II were deduced by UV and proton NMR spectroscopy. I and II also inhibited the growth of Staphylococcus aureus, Pseudomonas aeruginosa, Bacillus subtilis, and M. smegmatis. I and II may be involved in defense mechanisms in sponge.

IT 94936-60-2
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge, cell division inhibition by)
RN 94936-00-2 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



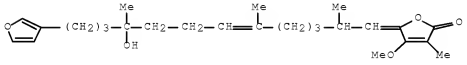
IT 94936-62-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, from furanosesterterpene of sponge)
RN 94936-02-4 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-6,8-tridecadienylidene]-3-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 47 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:592077 CAPLUS Full-text
DOCUMENT NUMBER: 99:192077
ORIGINAL REFERENCE NO.: 99:29527a,29530a
TITLE: Linear furanoterpenes from the sponge Ircinia muscarum
AUTHOR(S): Gonzalez, A. G.; Estrada, D.; Rodriguez, M. L.; San Martin, A.
CORPORATE SOURCE: Inst. Univ. Quim. Org., Univ. La Laguna, La Laguna, Spain
SOURCE: Anales de Quimica, Serie C: Quimica Organica y Bioquimica (1983), 79(1), 69-71
CODEN: AQSBD6; ISSN: 0211-1357
DOCUMENT TYPE: Journal
LANGUAGE: Spanish

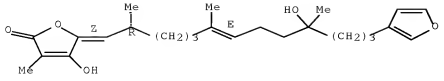
AB Two linear furanoterpenes were isolated from I. muscarum. Their structures and the stereochem. at the trisubstituted isoprenoid double bonds were established on the basis of their 1H- and 13C-NMR data by correlation with previously described compds.

IT 87734-73-4
RL: PRP (Properties)
(NMR of)
RN 87734-73-4 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecenylidene]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)



IT 82124-11-6
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge)
RN 82124-11-6 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



L11 ANSWER 48 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:419895 CAPLUS Full-text
DOCUMENT NUMBER: 99:19895
ORIGINAL REFERENCE NO.: 99:3185a,3188a
TITLE: On the stereochemistry and biogenesis of twenty-one carbon linear furanoterpenes in Ircinia sp
AUTHOR(S): Gonzalez Gonzalez, A.; Lopez Rodriguez, M.; San Martin Barrientos, A.
CORPORATE SOURCE: Inst. Quim. Org., Univ. La Laguna, La Laguna, Spain
SOURCE: Journal of Natural Products (1983), 46(2), 256-61
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

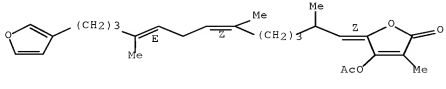
AB Two linear furanosesterterpenes (I and II) were isolated from I. dendroides. Their stereochem., and that of the previously described variabilin, at the trisubstituted isoprenoid double bonds was established on the basis of their 1H and 13C NMR data. Each sesterterpene co-occurred with a structurally and stereochem. related C21 furanoterpene (III and IV, resp.). A biogenetic-type degradation of the sesterterpenes to the related C21 furanoterpenes was carried out.

IT 86153-66-4
RL: PRP (Properties)
(NMR of, stereochem. in relation to)

RN 86153-66-4 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-6,9-tridecadienylidene]-3-methyl-, (Z,Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



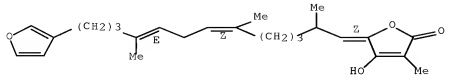
IT 86153-63-1
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge, structure and stereochem. of)

RN 86153-63-1 CAPLUS

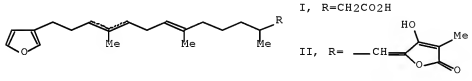
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-6,9-tridecadienylidene]-

4-hydroxy-3-methyl-, (Z,Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L11 ANSWER 49 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:421006 CAPLUS Full-text
DOCUMENT NUMBER: 97:21006
ORIGINAL REFERENCE NO.: 97:3665a,3668a
TITLE: Furanoterpenes from sea sponges of the genus Ircinia
AUTHOR(S): Gonzalez, A. G.; Lopez, M.; San Martin, A.
CORPORATE SOURCE: Inst. Prod. Nat. Org., CSIC, Tenerife, Spain
SOURCE: Boletin de la Sociedad Chilena de Quimica (1982), 27(2), 170-1
CODEN: BOCQAX; ISSN: 0366-1644
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
GI

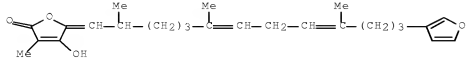


AB Twelve furanoterpenes, mostly of structures I or II (double bonds either E or Z) were isolated from 3 species of Ircinia by chromatog. on a silica gel column and their structures were determined by spectroscopic methods and chemical degradation

IT 82124-10-5 82124-11-6
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of sponge)

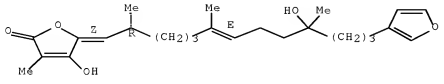
RN 82124-10-5 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-6,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



RN 82124-11-6 CAPLUS
CN 2(5H)-Furanone, 5-[(2R,6E)-13-(3-furanyl)-10-hydroxy-2,6,10-trimethyl-6-tridecen-1-ylidene]-4-hydroxy-3-methyl-, (5Z)- (CA INDEX NAME)

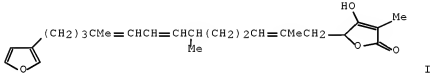
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.
Currently available stereo shown.



L11 ANSWER 50 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:136428 CAPLUS Full-text
DOCUMENT NUMBER: 94:136428
ORIGINAL REFERENCE NO.: 94:22307a,22310a
TITLE: Novel metabolites from some predator-prey pairs
AUTHOR(S): Cimino, G.; De Stefano, S.; De Rosa, S.; Sodano, G.; Villani, G.
CORPORATE SOURCE: Inst. Chim. Mol. Interesse Biol., CNR, Naples, Italy
SOURCE: Bulletin des Societes Chimiques Belges (1980), 89(12), 1069-73
CODEN: BSCBAG; ISSN: 0037-9646
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The presence of secondary metabolites in both nudibranchs and certain sponges and hydrides is taken as evidence of a predator-prey relation. Similarly, the absence of common secondary metabolites is considered to indicate that such a relation does not exist between the organisms. For example, both the nudibranch Dendrodoris grandiflora and the sponge Ircinia fasciculata contained fasciculatin, indicating a predator-prey relation even though the 2 organisms have not been observed in association On the other hand, the digestive gland of D. limbata contained a mixture of sesquiterpenoid esters, whereas the sponge Suberites domuncula on which it is occasionally found lacked these compds.; evidently D. limbata preys not on this sponge, but on others which contain similar compds.
IT 37905-12-7
RL: BIOL (Biological study)
(of nudibranch and sponge, predation in relation to)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

L11 ANSWER 51 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:607729 CAPLUS Full-text
DOCUMENT NUMBER: 91:207729
ORIGINAL REFERENCE NO.: 91:33443a,33446a
TITLE: Palinurin, a new linear sesterterpene from a marine sponge
AUTHOR(S): Alfano, G.; Cimino, G.; De Stefano, S.
CORPORATE SOURCE: Lab. Chim., CNR, Naples, Italy
SOURCE: Experientia (1979), 35(9), 1136-7
CODEN: EXPEAM; ISSN: 0014-4754
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

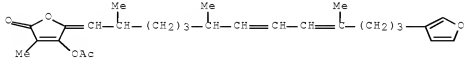


I

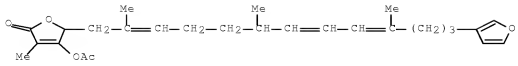
AB The isolation and structure of a new sesterterpene, palinurin (I), from Ircinia variabilis, a marine sponge, are given. Me2CO exts. of fresh sponge tissue were partitioned between Et2O and H2O and I in the Et2O-soluble portion was separated from fasciculatin (II) by silica gel chromatog. I had a mol. formula of C25H34O4 and was characterized by IR, UV, and 14C-NMR spectra. The latter spectrum was almost identical for I and II. In addition to confirming the suggested structure of I, NMR chemical shifts led to assignment of the E-stereochem. configuration for the double bonds at C-8 and C-17 of I and to the assignment of the stereochem. of the C-8 double bond of II. Olefinic bonds were determined by ozonolysis of I followed by oxidative reactions and successive methylation with CH2N2, leading to the assignment of the S-configuration at C-13.

IT 37867-29-1 71947-65-4
RL: PRP (Properties)
(NMR of)

RN 37867-29-1 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-3-methyl- (9CI) (CA INDEX NAME)

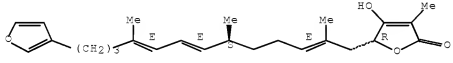


RN 71947-65-4 CAPLUS
CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrienyl]-3-methyl- (9CI) (CA INDEX NAME)



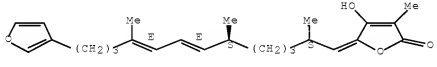
IT 71947-64-3
RL: BIOL (Biological study)
(a new sesterterpene, of marine sponge)
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

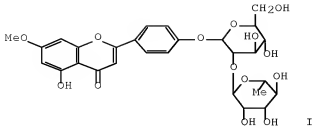


IT 37905-12-7
RL: BIOL (Biological study)
(stereochem. of, NMR in relation to)
RN 37905-12-7 CAPLUS
CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



L11 ANSWER 52 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1977:502122 CAPLUS Full-text
DOCUMENT NUMBER: 87:102122
ORIGINAL REFERENCE NO.: 87:16203a,16206a
TITLE: Flavonoids from Vernonia fasciculata Michx. Isolation of genkwanin and a new flavone disaccharide, fasciculatin
AUTHOR(S): Narain, Nand K.
CORPORATE SOURCE: Dep. Chem., North. Illinois Univ., Dekalb, IL, USA
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1977), (9), 1018-20
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

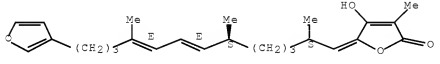
AB The structure of fasciculatin (I), a flavone disaccharide isolated, together with its aglycon genkwanin, from the CHCl3 extract of the leaves of V. fasciculata, was determined from chemical and spectral data.

IT 37905-12-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(of Vernonia fasciculata, structure of)

RN 37905-12-7 CAPLUS

CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



L11 ANSWER 53 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:410481 CAPLUS Full-text

DOCUMENT NUMBER: 83:10481

ORIGINAL REFERENCE NO.: 83:1765a

TITLE: Structure of antibiotics from the sponge Ircinia strobilina

AUTHOR(S): Rothberg, Irvin; Shubiak, Peter

CORPORATE SOURCE: Dep. Chem., Rutgers State Univ., Newark, NJ, USA

SOURCE: Tetrahedron Letters (1975), (10), 769-72
CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

LANGUAGE: English

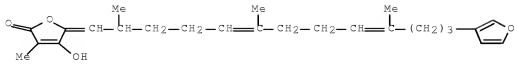
GI For diagram(s), see printed CA Issue.

AB Strobilinin (I) and variabilin (II) were isolated from I. strobilina. The structure of I was determined from chemical and spectral data.

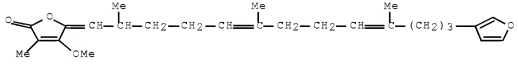
IT 56394-06-0P
RL: PREP (Preparation)
(from Ircinia strobilina, mol. structure of)

RN 56394-06-0 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

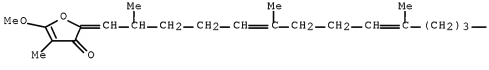


IT 56394-07-1P 56394-08-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 56394-07-1 CAPLUS
CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)



RN 56394-08-2 CAPLUS
CN 3(2H)-Furanone, 2-[13-(3-furanyl)-2,6,10-trimethyl-5,9-tridecadienylidene]-5-methoxy-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

L11 ANSWER 54 OF 54 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1972:405632 CAPLUS Full-text
DOCUMENT NUMBER: 77:5632
ORIGINAL REFERENCE NO.: 77:995a,998a
TITLE: Fasciculatin, a novel sesterterpene from the sponge Ircinia fasciculata
AUTHOR(S): Cafieri, F.; Fattorusso, E.; Santacroce, C.; Minale, L.
CORPORATE SOURCE: Ist. Chim. Org., Univ. Napoli, Naples, Italy
SOURCE: Tetrahedron (1972), 28(6), 1579-83
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.

AB A new furanosesterterpene, fasciculation (I), was isolated from the spongei. fasciculata.

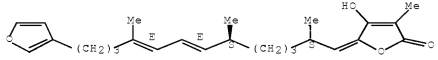
IT 37905-12-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(as structure for fasciculatin)

RN 37905-12-7 CAPLUS

CN 2(5H)-Furanone, 5-[(2S,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

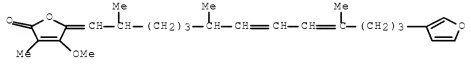


IT 37867-28-0P 37867-29-1P 37899-30-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

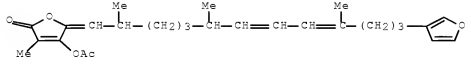
RN 37867-28-0 CAPLUS

CN 2(5H)-Furanone, 5-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-4-methoxy-3-methyl- (9CI) (CA INDEX NAME)



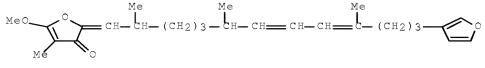
RN 37867-29-1 CAPLUS

CN 2(5H)-Furanone, 4-(acetyloxy)-5-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-3-methyl- (9CI) (CA INDEX NAME)



RN 37899-30-2 CAPLUS

CN 3(2H)-Furanone, 2-[13-(3-furanyl)-2,6,10-trimethyl-7,9-tridecadienylidene]-5-methoxy-4-methyl- (9CI) (CA INDEX NAME)



```
=> fil reg

FILE 'REGISTRY' ENTERED AT 10:20:27 ON 22 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   20 JUL 2008  HIGHEST RN 1035004-20-6
DICTIONARY FILE UPDATES:  20 JUL 2008  HIGHEST RN 1035004-20-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> e gsk 3/cn
E1            1     GSK 259211A/CN
E2            1     GSK 269962A/CN
E3            0 --> GSK 3/CN
E4            1     GSK 3 INHIBITOR IX/CN
E5            1     GSK 3 IX/CN
E6            1     GSK 319128A/CN
E7            1     GSK 319129A/CN
E8            1     GSK 319130A/CN
E9            1     GSK 319131A/CN
E10           1     GSK 319165A/CN
E11           1     GSK 319166A/CN
E12           1     GSK 319469A/CN

=> s e4-5
              1 "GSK 3 INHIBITOR IX"/CN
              1 "GSK 3 IX"/CN
L12           1 ("GSK 3 INHIBITOR IX"/CN OR "GSK 3 IX"/CN)

=> fil caplus;s l12

FILE 'CAPLUS' ENTERED AT 10:20:56 ON 22 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
```

American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Jul 2008 VOL 149 ISS 4
FILE LAST UPDATED: 20 Jul 2008 (20080720/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

```
L13         15 L12

=> s l13 not l11
L14         15 L13 NOT L11

=> s l14 and (marine or sea or ocean? or aquatic)
        115471 MARINE
            66 MARINES
        115512 MARINE
                  (MARINE OR MARINES)
        144069 SEA
          3917 SEAS
        145793 SEA
                  (SEA OR SEAS)
         80175 OCEAN?
         52767 AQUATIC
            75 AQUATICS
         52806 AQUATIC
                  (AQUATIC OR AQUATICS)
L15          0 L14 AND (MARINE OR SEA OR OCEAN? OR AQUATIC)


=> d 1-15 ibib abs hit l14

L14  ANSWER 1 OF 15  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:703378  CAPLUS  Full-text
DOCUMENT NUMBER:          149:24956
TITLE:                    Method to enhance tissue regeneration using modulators
                          of the prostaglandin or Wnt signaling pathways
INVENTOR(S):              Zon, Leonard I.
PATENT ASSIGNEE(S):       Children's Medical Center Corporation, USA; North,
                          Trista E.; Goessling, Wolfram
SOURCE:                   PCT Int. Appl., 47pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ----------------    ----   --------    --------------------   --------
     WO 2008070310        A2    20080612    WO 2007-US82093        20071022
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
```

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-853202P P 20061020
US 2006-853351P P 20061020

AB The present invention provides for compns. and methods for modulating tissue growth using tissue growth modulators, which are agents that either enhance or inhibit tissue growth as desired by a particular indication by modulating the prostaglandin (PG) or Wnt signaling pathways, or employing modulators of both PG and Wnt signaling pathways for a synergistic effect or highly selective effect.

IT 53-86-1, Indomethacin 363-24-6, PGE2 66575-29-9, Forskolin 667463-62-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method to enhance tissue regeneration using modulators of prostaglandin or Wnt signaling pathways)

L14 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:555903 CAPLUS Full-text
DOCUMENT NUMBER: 148:532755
TITLE: Methods of identifying small molecules for renewal, survival and migration of cardiac progenitors
INVENTOR(S): Evans, Sylvia; Chen, Ju; Lin, Lizhu; Chien, Ken; Qyang, Yibing; Moretti, Alessandra; Laugwitz, Karl
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of U.S. Ser. No. 544,053.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080108090	A1	20080508	US 2007-799839	20070502
US 20060246446	A1	20061102	US 2005-544053	20050729

PRIORITY APPLN. INFO.: US 2005-544053 A2 20050729
US 2006-797338P P 20060502
US 2003-444247P P 20030131
US 2003-484809P P 20030702
WO 2004-US2978 W 20040202

AB The present invention relates to a small mol. high-throughput screening assay consisting of detectably labeled cardiac progenitor cells. The invention also describes a method of identifying small mols. from the high-throughput assay affecting cardiogenesis and/or modulating cardiac progenitor cell development. Also described are methods of stimulating maturation of cardiac progenitor cells using a GSK-3β inhibitor.

IT 667463-62-8
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(as GSK-3β inhibitor, for stimulating maturation of cardiac

progenitor cells; identifying small mols. for renewal, survival and migration of cardiac progenitors)

L14 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:15302 CAPLUS Full-text
DOCUMENT NUMBER: 148:299196
TITLE: GSK-3β Inhibition Enhances Sorafenib-induced Apoptosis in Melanoma Cell Lines
AUTHOR(S): Panka, David J.; Cho, Daniel C.; Atkins, Michael B.; Mier, James W.
CORPORATE SOURCE: Division of Oncology, Beth Israel Deaconess Medical Center, Boston, MA, 02215, USA
SOURCE: Journal of Biological Chemistry (2008), 283(2), 726-732
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Glycogen synthase kinase-3β (GSK-3β) can participate in the induction of apoptosis or, alternatively, provide a survival signal that minimizes cellular injury. The authors previously demonstrated that the multikinase inhibitor sorafenib induces apoptosis in melanoma cell lines. In this report, the authors show that sorafenib activates GSK-3β in multiple subcellular compartments and that this activation undermines the lethality of the drug. Pharmacol. inhibition and/or down-modulation of the kinase enhances sorafenib-induced apoptosis as determined by propidium iodide staining and by assessing the mitochondrial release of apoptosis-inducing factor and Smac/DIABLO. Conversely, the forced expression of a constitutively active form of the enzyme (GSK-3βS9A) protects the cells from the apoptotic effects of the drug. This protective effect is associated with a marked increase in basal levels of Bcl-2, Bcl-xL, and survivin and a diminution in the degree to which these antiapoptotic proteins are down-modulated by sorafenib exposure. Sorafenib down-modulates the pro-apoptotic Bcl-2 family member Noxa in cells with high constitutive GSK-3β activity. Pharmacol. inhibition of GSK-3β prevents the disappearance of Noxa induced by sorafenib and enhances the down-modulation of Mcl-1. Down-modulation of Noxa largely eliminates the enhancing effect of GSK-3 inhibition on sorafenib-induced apoptosis. These data provide a strong rationale for the use of GSK-3β inhibitors as adjuncts to sorafenib treatment and suggest that preservation of Noxa may contribute to their efficacy.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 667463-62-9, GSK 3 Inhibitor IX
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GSK 3 Inhibitor IX, GSK 3 IX; GSK-3β inhibition enhances sorafenib-induced apoptosis in melanoma cell lines)

L14 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:9887 CAPLUS Full-text
DOCUMENT NUMBER: 148:116251
TITLE: Cell cluster comprising plural kinds of somatic cells with ability to form primitive organ-like structure
INVENTOR(S): Fujiwara, Shigeyoshi; Kishimoto, Jiro; Soma, Tsutomu
PATENT ASSIGNEE(S): Shiseido Company, Ltd., Japan
SOURCE: PCT Int. Appl., 46pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008001938	A1	20080103	WO 2007-JP63333	20070627

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2008029331	A	20080214	JP 2007-166893	20070625

PRIORITY APPLN. INFO.: JP 2006-176763 A 20060627

AB The invention provides a method for producing a cell cluster comprising plural kinds of somatic cells derived from soma with an ability to form a primitive organ-like structure, comprising preparing culture media containing the plural kinds of somatic cells, mixing the culture media of the plural kinds of somatic cells and then adding a Wnt signaling activator to the mixed cell culture medium, subjecting the culture medium containing the Wnt signaling activator to nonplanar contact culture for a predetd. period, replacing the medium of the culture subjected to the nonplanar contact culture with a medium not containing the Wnt signaling activator and further culturing it for a predetd. period, wherein at least one kind of the plural kinds of somatic cells maintains an undifferentiated state.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 667863-62-9
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(Wnt signaling activator, adding to mixed cell culture medium; cell cluster comprising plural kinds of somatic cells with ability to form primitive organ-like structure)

L14 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1365552 CAPLUS Full-text
DOCUMENT NUMBER: 148:534683
TITLE: A potential role for Dkk-1 in the pathogenesis of osteosarcoma predicts novel diagnostic and treatment strategies
AUTHOR(S): Lee, N.; Smolarz, A. J.; Olson, S.; David, O.; Reiser, J.; Kutner, R.; Daw, N. C.; Prockop, D. J.; Horwitz, E. M.; Gregory, C. A.
CORPORATE SOURCE: Department of Medicine, Center for Gene Therapy, Tulane University Health Sciences Center, New Orleans, LA, 70112, USA
SOURCE: British Journal of Cancer (2007), 97(11), 1552-1559
CODEN: BJCAAI; ISSN: 0007-0920
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Canonical Wnt signalling is an osteoinductive signal that promotes bone repair through acceleration of osteogenic differentiation by progenitors. Dkk-1 is a secreted inhibitor of canonical Wnt signalling and thus inhibits osteogenesis.

To examine a potential osteoinhibitory role of Dkk-1 in osteosarcoma (OS), we measured serum Dkk-1 in pediatric patients with OS (median age, 13.4 years) and found it to be significantly elevated. We also found that Dkk-1 was maximally expressed by the OS cells at the tumor periphery and in vitro, Dkk-1 and RANKL are coexpressed by rapidly proliferating OS cells. Both Dkk-1 and conditioned media from OS cells reduce osteogenesis by human mesenchymal cells and by immunodepletion of Dkk-1, or by adding a GSK3β inhibitor, the effects of Dkk-1 were attenuated. In mice, we found that the expression of Dkk-1 from implanted tumors was similar to the human tumor biopsies in that human Dkk-1 was present in the serum of recipient animals. These data demonstrate that systemic levels of Dkk-1 are elevated in OS. Furthermore, the expression of Dkk-1 by the OS cells at the periphery of the tumor probably contributes to its expansion by inhibiting repair of the surrounding bone. These data demonstrate that Dkk-1 may serve as a prognostic or diagnostic marker for evaluation of OS and furthermore, immunodepletion of Dkk-1 or administration of GSK3β inhibitors could represent an adjunct therapy for this disease.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 667463-62-9
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential role of Dkk-1 in pathogenesis of osteosarcoma predicts novel diagnostic tool and treatment strategies)

L14 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:510420 CAPLUS Full-text
DOCUMENT NUMBER: 146:480667
TITLE: Compositions and methods for producing pluripotent cells from adult testis
INVENTOR(S): Guan, Kaomei; Hasenfuss, Gerd; Nayernia, Karim; Engel, Wolfgang
PATENT ASSIGNEE(S): Georg-August-Universitaet Goettingen, Germany
SOURCE: PCT Int. Appl., 76pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007051625	A2	20070510	WO 2006-EP10529	20061102
WO 2007051625	A3	20070719		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 1943335	A2	20080716	EP 2006-806668	20061102
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.:		
US 2005-732132P	P	20051102
WO 2006-EP10529	W	20061102

AB The present application describes a method of producing embryonic stem cell (ESC)-like cells derived from adult mammalian testis. Furthermore, the application describes to a method of producing embryoid bodies from ESC-like cells as well as a method of producing a tissue and/or a differentiated cell from the ESC-like cell or the embryoid body. In addition, an ESC-like cell, an embryoid body and/or differentiated cell and/or tissue obtainable by said methods and pharmaceutical prepns. containing the same are provided. Finally, the application describes to the use of these products for medical treatments and the preparation of pharmaceutical compns. for medical treatments.

IT 62031-54-3, Fibroblast growth factor 667463-62-9, (2'Z,3'E)-6-Bromoindirubin3'-oxime 868234-84-8, B 27 (serum substitute)
RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)
(compns. and methods for producing pluripotent cells from adult testis)

L14 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:482969 CAPLUS Full-text
DOCUMENT NUMBER: 146:478265
TITLE: Specifying mesodermal, endodermal and mesoendodermal cell fates via activating Wnt signaling pathway
INVENTOR(S): Bakre, Manjiri; Stanton, Lawrence W.
PATENT ASSIGNEE(S): Agency for Science, Technology and Research, Singapore
SOURCE: PCT Int. Appl., 104pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007050043	A2	20070503	WO 2006-SG313	20061025
WO 2007050043	A3	20070802		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2006306809	A1	20070503	AU 2006-306809	20061025
EP 1941029	A2	20080709	EP 2006-813093	20061025
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2005-729666P	P 20051024
			WO 2006-SG313	W 20061025

AB This invention disclose a method for producing a mesodermal or a endodermal cell from a pluripotent stem cell, the method comprising activating a Wnt signaling pathway in the pluripotent stem cell. In some embodiments, the pluripotent stem cell is in a substantially 2 dimensional configuration, such as a monolayer, for at least a portion of the time when the Wnt signaling pathway is activated. This invention is based on the demonstration that the Wnt signaling pathway plays a key role in the choice of cell fate of embryonic stem cells. Specifically, the inventors demonstrate that the Wnt signaling pathway regulates the choice of the different fates or lineages an embryonic stem cell can potentially take, specifically, the choice between the three

germ layers, mesoderm, endoderm and ectoderm. The data demonstrate conclusively that sustained activation of Wnt pathway induces differentiation of ES cells. They find that activation of the Wnt signaling pathway in ES cells causes or induces the cells to differentiate along mesendodermal, mesodermal or endodermal pathways. Although the cells retain pluripotency markers viz Oct4 and Nanog even at day 21, the cells acquire a variety of meso/endodermal markers confirming induction of both mesoderm and endoderm in response to Wnt pathway activation. In addition no induction of ectoderm.

IT 667463-62-9
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(exposing pluripotent stem cell to to activate Wnt signalling pathway; specifying mesodermal, endodermal and mesoendodermal cell fates via activating Wnt signaling pathway)

L14 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:413644 CAPLUS Full-text
DOCUMENT NUMBER: 147:64088
TITLE: Inhibition of GSK3 Promotes Replication and Survival of Pancreatic Beta Cells
AUTHOR(S): Mussmann, Rainer; Geese, Marcus; Harder, Friedrich; Kegel, Simone; Andag, Uwe; Lomow, Alexander; Burk, Ulrike; Onichtchouk, Daria; Dohrmann, Cord; Austen, Matthias
CORPORATE SOURCE: DeveloGen AG, Goettingen, 37079, Germany
SOURCE: Journal of Biological Chemistry (2007), 282(16), 12030-12037
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recent developments indicate that the regeneration of beta cell function and mass in patients with diabetes is possible. A regenerative approach may represent an alternative treatment option relative to current diabetes therapies that fail to provide optimal glycemic control. Here we report that the inactivation of GSK3 by small mol. inhibitors or RNA interference stimulates replication of INS-1E rat insulinoma cells. Specific and potent GSK3 inhibitors also alleviate the toxic effects of high concns. of glucose and the saturated fatty acid palmitate on INS-1E cells. Furthermore, treatment of isolated rat islets with structurally diverse small mol. GSK3 inhibitors increases the rate beta cell replication by 2-3-fold relative to controls. We propose that GSK3 is a regulator of beta cell replication and survival. Moreover, our results suggest that specific inhibitors of GSK3 may have practical applications in beta cell regenerative therapies.

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 252917-06-9, CHIR 99021 487021-52-3 667463-62-9 676596-65-9, 1-Azakenpaullone
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of GSK3 promotes replication and survival of pancreatic beta cells)

L14 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1177860 CAPLUS Full-text
DOCUMENT NUMBER: 146:55308
TITLE: Effects of glycogen synthase kinase 3β and cyclin-dependent kinase 5 inhibitors on morphine-induced analgesia and tolerance in rats

AUTHOR(S): Parkitna, Jan Rodriguez; Obara, Ilona; Wawrzczak-Bargiela, Agnieszka; Makuch, Wioletta; Przewlocka, Barbara; Przewlocki, Ryszard

CORPORATE SOURCE: Department of Molecular Neuropharmacology, Institute of Pharmacology Polish Academy of Sciences, Krakow, Pol.

SOURCE: Journal of Pharmacology and Experimental Therapeutics (2006), 319(2), 832-839
CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: American Society for Pharmacology and Experimental Therapeutics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Repeated administration of morphine is associated with the development of tolerance, yet the mechanism underlying this phenomenon is still poorly understood. Recent evidence implicating glycogen synthase kinase 3 (GSK3) in opioid receptor signaling pathways has prompted us to investigate its role in morphine tolerance. Administration of 10 mg/kg morphine i.p. to Wistar rats twice daily for 8 days resulted in complete tolerance to its analgesic effects as measured by the tail-flick test. When injections of morphine were preceded by intrathecal (i.t.) administration of either an inhibitor of GSK3 [(3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-1H- pyrrole-2,5-dione(SB216763)or 6-bromoindirubin-3'-oxime)] or an inhibitor of cyclin-dependent kinase (Cdk), roscovitine, development of tolerance to morphine analgesia was completely abolished. In addition, a single i.t. injection of either kinase inhibitor was able to restore in a dose-dependent manner the analgesic effect of morphine in morphine-tolerant rats. None of the inhibitors in doses used in the present study had analgesic effects of their own nor an effect on the analgesic potency of morphine. Repeated i.t. administration of either inhibitor had caused an increase in abundance of GSK-3β phosphorylated at Ser9 in the dorsal lumbar part of the spinal cord of rats that were chronically treated with morphine. Furthermore, reversal of morphine tolerance by a single injection of either inhibitor was always associated with increased abundance of phospho-GSK3β. In conclusion, our data indicate that chronic morphine treatment activates a highly efficient pathway by which Cdk5 regulates GSK3β activity.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 52-26-6, Morphine hydrochloride 186692-46-6, Roscovitine 280744-09-4, SB216763 667463-62-9, (2'Z,3'E)-6-Bromoindirubin-3'-oxime
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of GSK3β and CDK5 inhibitors on morphine-induced analgesia and tolerance)

L14 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1176629 CAPLUS Full-text

DOCUMENT NUMBER: 145:483725

TITLE: Use of GSK-3 inhibitors for preventing and treating pancreatic autoimmune disorders

INVENTOR(S): Mussmann, Rainer; Austen, Matthias; Kelter, Arndt-Rene; Harder, Friedrich; Aicher, Babette; Lomow, Alexander

PATENT ASSIGNEE(S): Develogen Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 84pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006117212	A2	20061109	WO 2006-EP4170	20060504
WO 2006117212	A3	20070215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1728873	A1	20061206	EP 2005-11599	20050530

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU

EP 1885454	A2	20080213	EP 2006-724711	20060504

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.:	EP 2005-9846 A	20050504
	EP 2005-11599 A	20050530
	EP 2005-15986 A	20050722
	EP 2005-23168 A	20051024
	WO 2006-EP4170 W	20060504

OTHER SOURCE(S): MARPAT 145:483725

AB This invention relates to the use of Pax4 stimulating compds., e.g. Glycogen synthase kinase-3 (GSK-3) inhibitors, particularly in combination with immunomodulating agents, in the prevention, and/or treatment of pancreatic autoimmune disorders, e.g. type I diabetes or LADA. More particularly, this invention relates to the use of compds. selected from paullones, indirubines, substituted ureas, maleimide derivs. and pyrimidine thiones. Further, the present invention relates to a method of identifying and/or characterizing pancreatic beta-cell mitogens by using cells expressing a pancreatic gene or a gene whose function is controlled by a pancreatic gene, particularly the Pax4 gene, and which are transfected with a reporter gene.

IT 50-18-0, Cyclophosphamide 50-24-8, Prednisolone 50-44-2, 6-Mercaptopurine 50-99-7, D-Glucose, biological studies 57-13-6D, Urea, derivs. 59-05-2, Methotrexate 107-15-3D, Ethylenediamine, derivs. 446-86-6, Azathioprine 479-41-4D, Indirubin, derivs. 534-03-2D, 2-Amino-1,3-propanediol, derivs. 541-59-3D, Maleimide, derivs. 4291-63-8, Cladribine 4759-48-2, Isotretinoin 9002-62-4, Prolactin, biological studies 13292-46-1, Rifampicin 25167-62-8, Docosahexaenoic acid 53123-88-9, Sirolimus 59865-13-3, Cyclosporin A 61912-98-9, Insulin-like growth factor 62229-50-9, Epidermal growth factor 65271-80-9, Mitoxantrone 75706-12-6, Leflunomide 84088-42-6, Linomide 89750-14-1, Glucagon-like peptide I 89750-14-1D, Glucagon-like peptide I, derivs. 98629-43-7, Gusperimus 100324-81-0, Lisofylline 113462-26-3, 6-(3-Dimethylaminopropionyl)forskolin 113558-15-9, Baohuoside-1 128794-94-5, Mycophenolate mofetil 129666-86-0, Efomycine M 138812-76-7, L-683742 140608-64-6, Muromomab CD3 142273-20-9, Kenpaullone 147245-92-9, Glatiramer acetate 149749-33-7, Protein S 100 (mouse clone pGMS β-subunit reduced) 152923-56-3, Daclizumab 159351-69-6, Everolimus 162359-56-0 170277-31-3, Infliximab 174722-31-7, Rituximab 179045-86-4,

Basiliximab 179822-83-4, DIAPEP-277 185229-68-9, Alicaforsen 209533-83-5, α-Galactosylceramide 213190-65-9, Exendin 216503-57-0 222535-22-0, Alefacept 237430-03-4, Alsterpaullone 240814-54-4, BMS-279700 252917-06-9, CHIR99021 264218-23-7, SB415286 280744-09-4, SB216763 288392-69-8, Medi-507 331257-52-4, ISIS 2302 339087-45-5, MEDI 500 339181-10-1, BTI 322 441733-71-7, Activin C 477600-75-2, CP-690550 487021-52-3 503185-41-9, A 420983 556813-39-9, CHIR98014 561022-57-9, Activin D 667463-62-9 667463-85-6 676596-65-9, 1-Azakenpaullone 875901-30-7, IBC-VSO 1 875901-36-3, OKT 4A
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of GSK3 inhibitors for preventing and treating pancreatic autoimmune disorders)

L14 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:965102 CAPLUS Full-text
DOCUMENT NUMBER: 145:435236
TITLE: The GSK-3 Inhibitor BIO Promotes Proliferation in Mammalian Cardiomyocytes
AUTHOR(S): Tseng, Ai-Sun; Engel, Felix B.; Keating, Mark T.
CORPORATE SOURCE: Howard Hughes Medical Institute, Department of Cardiology, Harvard Medical School, Department of Cell Biology, Children's Hospital, Boston, MA, 02115, USA
SOURCE: Chemistry & Biology (Cambridge, MA, United States) (2006), 13(9), 957-963
CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The maintenance of self-renewal in stem cells appears to be distinct from the induction of proliferation of the terminally differentiated mammalian cardiomyocytes because it is believed that the latter are unable to divide. However, proliferation is a necessary step in both processes. Interestingly, the small mol. 6-bromoindirubin-3'-oxime (BIO) is the first pharmacol. agent shown to maintain self-renewal in human and mouse embryonic stem cells. To determine whether a mol. that can maintain stem cell properties can also participate in controlling the proliferative capability of the highly differentiated cardiomyocytes, the authors examine the effect of BIO in postmitotic cardiac cells. Here, they show that BIO promotes proliferation in mammalian cardiomyocytes. The demonstration of a second role for BIO suggests that the maintenance of stem cell self-renewal and the induction of proliferation in differentiated cardiomyocytes may share common mol. pathways.
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 667463-62-9
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3 inhibitor 6-bromoindirubin-3'-oxime promoting proliferation in cardiomyocytes)

L14 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:210137 CAPLUS Full-text
DOCUMENT NUMBER: 144:271358
TITLE: Methods and compositions utilizing myc and GSK3β to manipulate the pluripotency of embryonic stem cells
INVENTOR(S): Dalton, Stephen; Sheppard, Allan; McLean, Cameron
PATENT ASSIGNEE(S): University of Georgia Research Foundation, Inc., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 20060264 73	A2	20060309	WO 2005-US30488	20050825

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-604453P P 20040825

AB The present invention provides methods for stabilizing pluripotent cells through the transcriptional activation of c-myc. Alternatively, the cells are stabilized through the transcriptional activation of c-myc, and the stabilization of c-myc protein levels. C-myc protein can be stabilized through the inhibition of GSK3β or through other components of the cellular machinery that impact on c-myc stability. The invention contemplates the stabilized pluripotent cells produced using the methods described herein. Methods for the identification of compds. that modulate the stabilization of pluripotent cells through modulating transcriptional activation of c-myc, stabilization of c-myc protein levels, and/or inhibition of GSK3β activity are also contemplated.

IT 443900-95-6 667463-62-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods and compns. utilizing myc and GSK3β to manipulate the pluripotency of embryonic stem cells)

L14 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:126489 CAPLUS Full-text
DOCUMENT NUMBER: 144:205814
TITLE: Maintenance of embryonic stem cells by the GSK-3 inhibitor 6-bromoindirubin-3'-oxime
INVENTOR(S): Brivanlou, Ali; Sato, Noboru; Meijer, Laurent
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060030042	A1	20060209	US 2004-18784	20041220

PRIORITY APPLN. INFO.: US 2003-531250P P 20031219

AB The present invention relates to methods for maintaining the undifferentiated state of embryonic stem cells without the use of a feeder layer by activating the Wnt signal transduction pathway or by inhibiting glycogen synthase kinase-3 activity by contacting the cell with, inter alia, 6-bromoindirubin-3'-oxime.

The present invention also relates to embryonic stem cell lines and cells derived therefrom that have been isolated and cultured in the absence of a feeder layer.

IT 667463-62-9 667463-95-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(maintenance of embryonic stem cells by the GSK-3 inhibitor 6-bromoindirubin-3'-oxime)

L14 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:337954 CAPLUS Full-text
DOCUMENT NUMBER: 142:476000
TITLE: Lithium activates the wnt and phosphatidylinositol 3-kinase akt signaling pathways to promote cell survival in the absence of soluble survival factors
AUTHOR(S): Sinha, Diviya; Wang, Zhiyong; Ruchalski, Kathleen L.; Levine, Jerrold S.; Krishnan, Selvi; Lieberthal, Wilfred; Schwartz, John H.; Borkan, Steven C.
CORPORATE SOURCE: Renal Section, Boston Medical Center, Boston University School of Medicine, Boston, MA, USA
SOURCE: American Journal of Physiology (2005), 288(4, Pt. 2), F703-F713
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Mouse proximal tubular cells (BUMPT), when cultured in the absence of growth factors, activate a default apoptotic pathway. Although Wnt signaling antagonizes the effect of proapoptotic triggers, its role in regulating the default pathway of apoptosis is less well defined. The present study examines the hypothesis that lithium (Li+) and (2'Z,3'E)-6-bromoindirubin-3'-oxime (BIO), two glycogen synthase kinase-3β (GSK3β) inhibitors, promote survival of growth factor-deprived renal epithelial cells by activating the Wnt pathway. These studies demonstrate that Li+ and BIO activate Wnt signaling as indicate by the following changes: phosphorylation (inhibition) of GSK3β; decreased phosphorylation of β-catenin (a GSK3β substrate); nuclear translocation of β-catenin; specific transcriptional activation of Tcf/catenin-responsive pTopflash constructs; and an increase in the expression of cyclin D1 (indicative of a promitogenic cell response). In addition, Li+ or BIO significantly increases the phosphorylation (activation) of Akt, an anti-apoptotic protein, and inhibits apoptosis (decreases both annexin-V staining and caspase-3 activation), during serum deprivation. Inhibition of phosphatidylinositol 3-kinase (responsible for Akt activation) either by wortmanin or LY-294002 prevented Li+- or BIO-induced Akt phosphorylation and reduces cell survival without altering the phosphorylation state of GSK3β. Li+ or BIO also increases the expression of insulin-like growth factor-II (IGF-II), a potent proliferative signaling protein. Li+ or BIO-free conditioned medium harvested from Li+- or BIO-exposed cells also induced Akt phosphorylation, mimicking the protective effect of the two GSK3β inhibitors on serum-starved cells. Furthermore, the effect of conditioned medium on Akt phosphorylation could be inhibited by either LY-294002 or IGF-binding protein. BIO, a specific GSK3β inhibitor, replicated the protective effect of Li+ on cell viability, suggesting that GSK3β activation is important for initiating the apoptotic pathway. Taken together, these data suggest that Li+ or BIO promotes renal epithelial cell survival by inhibiting apoptosis through GSK3β-dependent activation of the Wnt pathway and subsequent release of IGF-II. Extracellular IGF-II serves as an autocrine survival factor that is responsible, in part, for activating the anti-apoptotic phosphatidylinositol-3-kinase-Akt pathway during serum deprivation.

REFERENCE COUNT: 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 7439-93-2, Lithium, biological studies 667463-62-9, (2'Z,3'E)-6-Bromoindirubin-3'-oxime
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lithium activates the wnt and phosphatidylinositol 3-kinase akt signaling pathways to promote cell survival in absence of soluble survival factors)

L14 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:45406 CAPLUS Full-text
DOCUMENT NUMBER: 140:235527
TITLE: Structural Basis for the Synthesis of Indirubins as Potent and Selective Inhibitors of Glycogen Synthase Kinase-3 and Cyclin-Dependent Kinases
AUTHOR(S): Polychronopoulos, Panagiotis; Magiatis, Prokopios; Skaltsounis, Alexios-Leandros; Myrianthopoulos, Vassilios; Mikros, Emmanuel; Tarricone, Aldo; Musacchio, Andrea; Roe, S. Mark; Pearl, Laurence; Leost, Maryse; Greengard, Paul; Meijer, Laurent
CORPORATE SOURCE: Laboratory of Pharmacognosy, Laboratory of Pharmaceutical Chemistry, Department of Pharmacy, University of Athens, Athens, GR-15771, Greece
SOURCE: Journal of Medicinal Chemistry (2004), 47(4), 935-946 CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:235527

AB Pharmacol. inhibitors of glycogen synthase kinase-3 (GSK-3) and cyclin-dependent kinases have promising potential for applications against several neurodegenerative diseases such as Alzheimer's disease. Indirubins, a family of bis-indoles isolated from various natural sources, are potent inhibitors of several kinases, including GSK-3. Using the co-crystal structures of various indirubins with GSK-3β, CDK2 and CDK5/p25, we have modeled the binding of indirubins within the ATP-binding pocket of these kinases. This modeling approach provided some insight into the mol. basis of indirubins' action and selectivity and allowed us to forecast some improvements of this family of bis-indoles as kinase inhibitors. Predicted mols., including 6-substituted and 5,6-disubstituted indirubins, were synthesized and evaluated as CDK and GSK-3 inhibitors. Control, kinase-inactive indirubins were obtained by introduction of a Me substitution on N1.

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 479-41-4P 667463-60-7P 667463-62-9P 667463-65-2P
667463-69-6P 667463-70-9P 667463-71-0P 667463-72-1P 667463-73-2P
667463-74-3P 667463-75-4P 667463-76-5P 667463-77-6P 667463-78-7P
667463-79-8P 667463-80-1P 667463-81-2P 667463-82-3P 667463-83-4P
667463-97-0P 667463-98-1P 667463-99-2P
RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indirubins from anilines and glycogen synthase kinase-3 and cyclin-dependent kinase inhibition)

=> s gordillo d?/au;s diaz, i?/au;s martinez-gil a?/au or gil a?/au;s del pliego g?/au or pliego g?/au
L16 4 GORDILLO D?/AU

```
L17        194 DIAZ, I?/AU


            30 MARTINEZ-GIL A?/AU
          1010 GIL A?/AU
L18       1039 MARTINEZ-GIL A?/AU OR GIL A?/AU


              1 DEL PLIEGO G?/AU
              1 PLIEGO G?/AU
L19           2 DEL PLIEGO G?/AU OR PLIEGO G?/AU

=> s l16 and l17 and l18 and l19
L20           0 L16 AND L17 AND L18 AND L19

=> fil medl,biosis,embase,aquatic,ocean
'
FILE 'MEDLINE' ENTERED AT 10:24:42 ON 22 JUL 2008

FILE 'BIOSIS' ENTERED AT 10:24:42 ON 22 JUL 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 10:24:42 ON 22 JUL 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'OCEAN' ENTERED AT 10:24:42 ON 22 JUL 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

=> s l5 or l10
L21           0 FILE MEDLINE
L22           5 FILE BIOSIS
L23           0 FILE EMBASE

FILE 'OCEAN'
SUBSTANCE QUERIES NOT VALID IN THIS FILE
The logic expression entered contains L#s or saved query names which
correspond to structures built by the STRUCTURE command or to screen
sets.  These must be searched in a substance file such as the REGISTRY
file.  In some files you may use a Registry Number answer set from a
structure search as a search term or profile in some bibliographic
file containing Registry Numbers, e.g.  the CA file.  For an
explanation, enter "HELP CROSSOVER" at an arrow prompt (=>).

=> d l22 1-5

L22  ANSWER 1 OF 5  BIOSIS  COPYRIGHT (c) 2008 The Thomson Corporation  on STN
AN   2004:80011  BIOSIS  Full-text
DN   PREV200400081726
TI   A new marine metabolite from Isis hippuris and a furanosesterterpene from
     Aplysilla sulfurea.
AU   Chang, Yao-To [Reprint Author]; Lin, Chung-Ling [Reprint Author]; Khalil,
     Ashraf Taha [Reprint Author]; Shen, Ya Ching [Reprint Author]
CS   Institute of Marine Resources, National Sun Yat-sen University, Kaohsiung,
     Taiwan
SO   Chinese Pharmaceutical Journal (Taipei), (April 2003) Vol. 55, No. 2, pp.
     129-133. print.
     CODEN: CYHCEX. ISSN: 1016-1015.
DT   Article
```

LA English
ED Entered STN: 4 Feb 2004
Last Updated on STN: 4 Feb 2004

L22 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1997:198312 BIOSIS Full-text
DN PREV199799497515
TI Concise, stereoselective syntheses and novel transformations of beta-lactones: Applications to natural product synthesis.
AU Romo, Daniel; Yang, Hong Woon; Schmitz, William D.
CS Dep. Chem., Texas A and M University, College Station, TX 77843-3255, USA
SO Abstracts of Papers American Chemical Society, (1997) Vol. 213, No. 1-3, pp. ORGN 624.
Meeting Info.: 213th National Meeting of the American Chemical Society. San Francisco, California, USA. April 13-17, 1997.
CODEN: ACSRAL. ISSN: 0065-7727.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 2 May 1997
Last Updated on STN: 2 Jun 1997

L22 ANSWER 3 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1996:449152 BIOSIS Full-text
DN PREV199699171508
TI Total synthesis and structure determination of okinonellin B via A beta-lactone intermediate.
AU Schmitz, William D.; Yang, Hong Woon; Romo, Daniel
CS Dep. Chem., Texas A and M Univ., College Station, TX 77843-3255, USA
SO Abstracts of Papers American Chemical Society, (1996) Vol. 212, No. 1-2, pp. ORGN 247.
Meeting Info.: 212th American Chemical Society National Meeting. Orlando, Florida, USA. August 25-29, 1996.
CODEN: ACSRAL. ISSN: 0065-7727.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 7 Oct 1996
Last Updated on STN: 5 Nov 1996

L22 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1985:65530 BIOSIS Full-text
DN PREV198528065530; BR28:65530
TI BIOACTIVE MARINE METABOLITES 5. 2 NEW FURANOSESTERTERPENES INHIBITORS OF CELL DIVISION OF THE FERTILIZED STARFISH ASTERINA-PECTINIFERA EGGS FROM THE MARINE SPONGE CACOSPONGIA-SCALARIS.
AU FUSETANI N [Reprint author]; KATO Y; MATSUNAGA S; HASHIMOTO K
CS LABORATORY OF MARINE BIOCHEMISTRY, FACULTY OF AGRICULTURE, UNIVERSITY OF TOKYO, BUNKYO-KU, TOKYO, JAPAN
SO Tetrahedron Letters, (1984) Vol. 25, No. 43, pp. 4941-4942.
CODEN: TELEAY. ISSN: 0040-4039.
DT Article
FS BR
LA ENGLISH

L22 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1977:242519 BIOSIS Full-text
DN PREV197764064883; BA64:64883
TI FLAVONOIDS FROM VERNONIA-FASCICULATA ISOLATION OF GENKWANIN AND A NEW FLAVONE DI SACCHARIDE FASCICULATIN.

```
AU   NARAIN N K
SO   Journal of the Chemical Society Perkin Transactions I, (1977) No. 9, pp.
     1018-1024.
     CODEN: JCPRB4. ISSN: 0300-922X.
DT   Article
FS   BA
LA   Unavailable


=> s gsk 3 or l14
L24        935 FILE MEDLINE
L25       2269 FILE BIOSIS
L26       1684 FILE EMBASE
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms.  L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles.  The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

=> s gsk 3
L27        935 FILE MEDLINE
L28       2269 FILE BIOSIS
L29       1684 FILE EMBASE
L30          0 FILE OCEAN

TOTAL FOR ALL FILES
L31       4888 GSK 3

=> fil medl,biosis,embase

FILE 'MEDLINE' ENTERED AT 10:26:37 ON 22 JUL 2008

FILE 'BIOSIS' ENTERED AT 10:26:37 ON 22 JUL 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 10:26:37 ON 22 JUL 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

=> s l31 and (marine or sea or ocean? or aquatic)
L32          6 FILE MEDLINE
L33         13 FILE BIOSIS
L34          5 FILE EMBASE

TOTAL FOR ALL FILES
L35         24 L31 AND (MARINE OR SEA OR OCEAN? OR AQUATIC)

=> dup rem l35
PROCESSING COMPLETED FOR L35
L36          14 DUP REM L35 (10 DUPLICATES REMOVED)

=> d 1-14 ibib abs

L36  ANSWER 1 OF 14     MEDLINE on STN                  DUPLICATE 1
ACCESSION NUMBER:    2008127838     MEDLINE  Full-text
DOCUMENT NUMBER:     PubMed ID: 18232649
TITLE:               Meriolins (3-(pyrimidin-4-yl)-7-azaindoles): synthesis,
                     kinase inhibitory activity, cellular effects, and structure
                     of a CDK2/cyclin A/meriolin complex.
```

AUTHOR: Echalier Aude; Bettayeb Karima; Ferandin Yoan; Lozach Olivier; Clement Monique; Valette Annie; Liger Francois; Marquet Bernard; Morris Jonathan C; Endicott Jane A; Joseph Benoit; Meijer Laurent

CORPORATE SOURCE: Laboratory of Molecular Biophysics, Department of Biochemistry, The Rex Richards Building, University of Oxford, UK.

SOURCE: Journal of medicinal chemistry, (2008 Feb 28) Vol. 51, No. 4, pp. 737-51. Electronic Publication: 2008-01-31. Journal code: 9716531. ISSN: 0022-2623.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

OTHER SOURCE: PDB-3BHT; PDB-3BHU; PDB-3BHV

ENTRY MONTH: 200805

ENTRY DATE: Entered STN: 22 Feb 2008
Last Updated on STN: 20 May 2008
Entered Medline: 19 May 2008

AB We report the synthesis and biological characterization of 3-(pyrimidin-4-yl)-7-azaindoles (meriolins), a chemical hybrid between the natural products meridianins and variolins, derived from marine organisms. Meriolins display potent inhibitory activities toward cyclin-dependent kinases (CDKs) and, to a lesser extent, other kinases (GSK-3, DYRK1A). The crystal structures of le (meriolin 5) and variolin B (Bettayeb, K.; Tirado, O. M.; Marionneau-Lambert, S.; Ferandin, Y.; Lozach, O.; Morris, J.; Mateo-Lozano, S.; Druckes, P.; Schachtele, C.; Kubbutat, M.; Liger, F.; Marquet, B.; Joseph, B.; Echalier, A.; Endicott, J.; Notario, V.; Meijer, L. Cancer Res. 2007, 67, 8325-8334) in complex with CDK2/cyclin A reveal that the two inhibitors are orientated in very different ways inside the ATP-binding pocket of the kinase. A structure-activity relationship provides further insight into the molecular mechanism of action of this family of kinase inhibitors. Meriolins are also potent antiproliferative and proapoptotic agents in cells cultured either as monolayers or in spheroids. Proapoptotic efficacy of meriolins correlates best with their CDK2 and CDK9 inhibitory activity. Meriolins thus constitute a promising class of pharmacological agents to be further evaluated against the numerous human diseases that imply abnormal regulation of CDKs including cancers, neurodegenerative disorders, and polycystic kidney disease.

L36 ANSWER 2 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
DUPLICATE 2

ACCESSION NUMBER: 2007:424741 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700421621

TITLE: Wnt signaling in hydroid development: ectopic heads and giant buds induced by GSK-3 beta inhibitors.

AUTHOR(S): Mueller, Werner; Frank, Uri; Teo, Regina; Mokady, Ofer; Guette, Christina; Plickert, Guenter [Reprint Author]

CORPORATE SOURCE: Univ Cologne, Inst Zool, Weyertal 119, D-50923 Cologne, Germany
g.plickert@uni-koeln.de

SOURCE: International Journal of Developmental Biology, (2007) Vol. 51, No. 3, pp. 211-220.
CODEN: IJDBE5. ISSN: 0214-6282.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 8 Aug 2007
Last Updated on STN: 8 Aug 2007

AB In Hydractinia, a colonial marine hydroid representing the basal phylum Cnidaria, Wnt signaling plays a major role in the specification of the primary body axis in embryogenesis and in the establishment of the oral pole during metamorphosis. Here we report supplementing investigations on head regeneration and bud formation in post-metamorphic development. Head and bud formation were accompanied by the expression of Wnt, frizzled and Tcf. Activation of Wnt signaling by blocking GSK-3 beta affected regeneration, the patterning of growing polyps and the asexual formation of new polyps in the colony. In the presence of lithium ions or paullones, gastric segments excised from adult polyps showed reversal of tissue polarity as they frequently regenerated heads at both ends. Phorbol myristate acetate, a known activator of protein kinase C increased this effect. Global activation of the Wnt pathway caused growing polyps to form ectopic tentacles and additional heads along their body column. Repeated treatment of colonies evoked the emergence of many and dramatically oversized bud fields along the circumference of the colony. These giant fields fell apart into smaller sub-fields, which gave rise to arrays of multiheaded polyps. We interpret the morphogenetic effects of blocking GSK-3 beta as reflecting increase in positional value in terms of positional information and activation of Wnt target genes in molecular terms.

L36 ANSWER 3 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2006:621485 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600606729
TITLE: Multiple roles for glycogen synthase kinase-3 as a drug target in Alzheimer's disease.
AUTHOR(S): Huang, Hui-Chuan; Klein, Peter S. [Reprint Author]
CORPORATE SOURCE: Univ Penn, Sch Med, Dept Med Hematol Oncol, 364 Clin Res Bldg,415 Curie Blvd, Philadelphia, PA 19104 USA pklein@mail.med.upenn.edu
SOURCE: Current Drug Targets, (NOV 2006) Vol. 7, No. 11, pp. 1389-1397.
ISSN: 1389-4501.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Nov 2006
Last Updated on STN: 15 Nov 2006

AB Alzheimer's disease (AD) is a common neurodegenerative disorder that presents clinically as inexorable cognitive impairment and decline in performance of activities of daily living. AD is characterized pathologically by neuronal depopulation, extracellular amyloid plaques, and intraneuronal accumulation of neurofibrillary tangles (NFTs). Accumulation of these polypeptide aggregates is generally believed to be integral to the pathogenesis of AD. Recent evidence implicates the protein kinase glycogen synthase kinase 3 (GSK-3) in the regulation of both of these processes. GSK-3 has long been studied as one of several tau protein kinases, and has more recently been shown to be involved in the generation of AB peptides. GSK-3 activity may also promote cell death and conversely, inhibition of GSK-3 has been associated with increased cell survival under a variety of cytotoxic conditions. Thus drugs that target GSK-3 could attack AD pathogenesis on multiple fronts simultaneously. Here we will briefly review the molecular understanding of AD pathogenesis as it stands at this point, and then discuss the emerging role of GSK-3 in regulating these processes.

L36 ANSWER 4 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2006:209714 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600211443

TITLE: Wnt signalling mobilises beta-catenin and stimulates cell proliferation in isolated human colonic crypts.

AUTHOR(S): Parris, Alyson; Reynolds, Amy; Spahos, Theo; Munsterberg, Andrea; Tighe, Richard; Cook, Jane; Prior, Alison; Speakman, Chris; Stebbings, Bill; Hemon, James; Williams, Mark

SOURCE: Gastroenterology, (APR 2005) Vol. 128, No. 4, Suppl. 2, pp. A489.
Meeting Info.: Annual Meeting of the American-Gastroenterological-Association/Digestive-Disease-Week. Chicago, IL, USA. May 14 -19, 2005. Amer Gastroenterol Assoc.
CODEN: GASTAB. ISSN: 0016-5085.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Mar 2006
Last Updated on STN: 29 Mar 2006

AB The canonical Wnt signalling pathway is essential to the development and maintenance of homeostasis in the marine intestinal epithelium. Wnt signals have been shown ot govern stem cell biology in other adult tissues and aberrant Wnt pathway signaling is an early progression event in colon carcinogenesis. AIM: To investigate the role of Wnt signals in regulating human colonic crypt cell proliferation. METHODS: Colonic crypts were isolated from tissue biopsies obtained at sigmoidoscopy from healthy-subjects (Ethical approval). Isolated crypts were attached to collagen-coated coverslips and cultured for 24 hours - 5 days in serum-free DMEM (5%CO2/37 degrees C). The canonical Wnt pathway was stimulated by conditioned media (Wnt1-CM) derived from Wnt1 expressing fibroblasts or by incubation with one of the GSK-3beta inhibitors (GSKIs), maleimide SB216763 (100 nM-1 mu M) or 6-bromoindirubin compound (BIO, 5 mu M). Beta-catenin expression and localisation was assessed by using a monoclonal FITC conjugated antibody in conjunction with confocal microscopy and semi-quantitative image analysis. For crypt cell proliferation experiments crypts were incubated (final 24 hours of culture period) with BrdU (10 mu M) and nuclear incorporation was assessed by immunofluorescence (anti-BrdU and -Ki67).. RESULTS: The crypt cell proliferation hierarchy was maintained throughout a culture period lasting at least 5 days, nuclear BrDU incorporation (24 hour incubation) predominant at the crypt-base. Untreated cells exhibited 5-15 beta-catenin nuclear positive cells per crypt-base. Low levels of membranous beta-catenin labelling were evident throughout the crypt. Cellular beta-catenin levels were elevated following incubation with GSKIs and Wnt1 conditioned media (1, 4 and 24 hours). Nuclear labelling was abundant (> 90% of cells at the crypt-base) and membranous beta-catenin intensified along the entire crypt-axis (n > 30 crypts derived from 10 patients), GSKIs and Wnt1-CM stimulated a concomitant increase in nuclear BrDU incorporation at the crypt-base: 208 +/- 5% (SB216763 w.r.t. control, 100nM, n=51 P < 0.01) and 148 +/- 7% (Wnt1-CM w.r.t control, n=8; P < 0.01) CONCLUSIONS: Wnt1 ligand and GSK-3-beta inhibitors induced canonical Wnt signals in isolated human colonic crypts and stimulate crypt cell proliferation. The identity of the participating cell types and possible affects on intestinal stem cells remain to be determined.

L36 ANSWER 5 OF 14 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2004357932 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 15261294
TITLE: Potent inhibition of checkpoint kinase activity by a hymenialdisine-derived indoloazepine.
AUTHOR: Sharma Vasudha; Tepe Jetze J
CORPORATE SOURCE: Department of Chemistry, Michigan State University, East

Lansing, MI 48824, USA.
SOURCE: Bioorganic & medicinal chemistry letters, (2004 Aug 16) Vol. 14, No. 16, pp. 4319-21. Journal code: 9107377. ISSN: 0960-894X.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200502
ENTRY DATE: Entered STN: 21 Jul 2004
Last Updated on STN: 24 Feb 2005
Entered Medline: 23 Feb 2005

AB The marine sponge metabolite hymenialdisine is a potent inhibitor of a variety of kinases including MEK-1, GSK-3 beta, and CK1. In addition, hymenialdisine and debromohymenialdisine exhibit inhibition of the G(2) cell cycle checkpoint at micromolar concentrations. We report herein the potent inhibition of cell cycle kinase Chk2 by the indolic-hymenialdisine indoloazepine 1 (IC(50)=8 nM).

L36 ANSWER 6 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2005:476626 BIOSIS Full-text
DOCUMENT NUMBER: PREV200510268530
TITLE: Pim kinases mediate viability signals downstream of the tyrosine kinase Oncogenes BCR-ABL and FLT3-ITD.
AUTHOR(S): Sattler, Martin [Reprint Author]; Babendreier, Emily; Chu, Stephanie C.; Gramlich, Jessica L.; Podar, Klaus; Griffin, James D.
CORPORATE SOURCE: Dana Farber Canc Inst, Dept Med Oncol, Boston, MA 02115 USA
SOURCE: Blood, (NOV 16 2004) Vol. 104, No. 11, Part 1, pp. 161A. Meeting Info.: 46th Annual Meeting of the American-Society-of-Hematology. San Diego, CA, USA. December 04 -07, 2004. Amer Soc Hematol. CODEN: BLOOAW. ISSN: 0006-4971.
DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 2005
Last Updated on STN: 16 Nov 2005

AB Pim1 and Pim2 belong to a family of serine/threonine kinases that are overexpressed in many leukemias. Pim1 has previously been shown to cooperate with the v-myc oncogene to transform hematopoietic cells with marine transforming viruses and overexpression of Pim2 has been shown to induce growth factor independence in a factor dependent murine BaF3 cell line. Protein expression of both Pim1 and Pim2 is low or absent in non-transformed hematopoietic cells but was found to be rapidly increased upon transformation by BCR-ABL or FLT3 with an internal tandem duplication (ITD). The exact contribution of the Pim kinases to transformation in these cells is unknown. BaF3 cell lines were created that stably expressed either BCR-ABL or FLT3-ITD tyrosine kinases, and in which eitherPim1 or Pim2 could be induced with doxycycline. Treatment of BCR-ABL or FLT3-ITD expressing cells with small molecule kinase inhibitors specific for eitherABL or FLT3 led to inhibition of cell growth, increased apoptosis, and downregulation of Pim expression as expected. However, if Pim2, and to a lesser extent, Pim I expression was maintained by doxycycline, there was a substantial increase in both viability and cell growth. The molecular mechanisms by which Pim proteins exhibit their effects on target cells are not known. Using parentalgrowth factor dependent BaF3 cell lines with doxycycline inducible Pim1 and Pim2, we show that expression of either of the Pim proteins is sufficient, by itself, to reduce apoptosis and induce modest cell growth. The effects of Pim overexpression on

several pathways known to be associated with viability were studied. We found that while Pint over-expression does not activate Akt, it does result in the phosphorylation of a known Akt target, GSK-3 beta, a regulatorof cell cycle progression by targeting the stability of cyclin D proteins. This suggests that Pint proteins may mediate their biological effects through regulation of components in the phosphatidylinositol-3' kinase signaling cascade, independent of Akt activation. These results further suggest that upregulation of Pim kinases significantly contributes to transformation. Inhibition of Pim kinases could have beneficial therapeutic effects in leukemias.

L36 ANSWER 7 OF 14 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 2004085103 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 14974610
TITLE: Polyprenyl-hydroquinones and -furans from three marine sponges inhibit the cell cycle regulating phosphatase CDC25A.
AUTHOR: Erdogan-Orhan Ilkay; Sener Bilge; de Rosa Salvatore; Perez-Baz Julia; Lozach Olivier; Leost Maryse; Rakhilin Sergei; Meijer Laurent
CORPORATE SOURCE: Department of Pharmacognosy, Faculty of Pharmacy, Gazi University 06330, Ankara, Turkey.. iorhan@gazi.edu.tr
SOURCE: Natural product research, (2004 Feb) Vol. 18, No. 1, pp. 1-9.
Journal code: 101167924. ISSN: 1478-6419.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200405
ENTRY DATE: Entered STN: 21 Feb 2004
Last Updated on STN: 25 May 2004
Entered Medline: 24 May 2004
AB The CDC25 phosphatases regulate the cell division cycle by controlling the activity of cyclin-dependent kinases. While screening for inhibitors of phosphatases among natural products we repeatedly found that some polyprenyl-hydroquinones and polyprenyl-furans (furanoterpenoids) (furospongins, furospinosulins) were potent CDC25 phosphatase inhibitors. These compounds were extracted, isolated and identified independently from three sponge species (Spongia officinalis, Ircinia spinulosa, Ircinia muscarum), collected at different locations in the Mediterranean Sea. The compounds were inactive on the Ser/Thr phosphatase PP2C-alpha and on three kinases (CDK1, CDK5, GSK-3), suggesting that some potent and selective CDC25 phosphatase might be designed from these initial structures.

L36 ANSWER 8 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:247059 BIOSIS Full-text
DOCUMENT NUMBER: PREV200300247059
TITLE: Wnt signaling during sea urchin embryonic cell specification.
AUTHOR(S): Dechtiaruk, Anna M. [Reprint Author]; Bert, Becki M. [Reprint Author]; Peeler, Margaret T. [Reprint Author]
CORPORATE SOURCE: Department of Biology, Susquehanna University, Selinsgrove, PA, 17870, USA
SOURCE: Journal of the Pennsylvania Academy of Science, (March 2003) Vol. 76, No. Abstract and Index Issue, pp. 114. print.

Meeting Info.: 79th Annual Meeting of the Pennsylvania Academy of Science. Grantville, Pennsylvania, USA. April 04-06, 2003.
CODEN: JPSCEY. ISSN: 1044-6753.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 21 May 2003
Last Updated on STN: 21 May 2003

L36 ANSWER 9 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:475941 BIOSIS Full-text
DOCUMENT NUMBER: PREV200200475941
TITLE: beta-Catenin is differentially degraded along the animal-vegetal axis of early sea urchin embryos in a GSK-3beta-dependent manner.
AUTHOR(S): Weitzel, Heather E. [Reprint author]; Ettensohn, Charles A. [Reprint author]
CORPORATE SOURCE: Carnegie Mellon University, Pittsburgh, PA, USA
SOURCE: Developmental Biology, (July 15, 2002) Vol. 247, No. 2, pp. 479-480. print.
Meeting Info.: Sixty-first Annual Meeting of the Society for Developmental Biology. Madison, WI, USA. July 21-25, 2002.
CODEN: DEBIAO. ISSN: 0012-1606.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Sep 2002
Last Updated on STN: 11 Sep 2002

L36 ANSWER 10 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:456882 BIOSIS Full-text
DOCUMENT NUMBER: PREV200200456882
TITLE: Evolutionary conserved glycogen synthase kinase-3 in sea urchin spermatozoa is regulated by protein kinase A and egg-derived factors.
AUTHOR(S): Mishra, Sanjay [Reprint author]; Sapola, Brian M. [Reprint author]; Jack, Shannan [Reprint author]; Vijayaraghavan, Srinivasan [Reprint author]
CORPORATE SOURCE: Biological Sciences Department, Kent State University, Kent, OH, USA
SOURCE: Biology of Reproduction, (2002) Vol. 66, No. Supplement 1, pp. 173. print.
Meeting Info.: 35th Annual Meeting of the Society for the Study of Reproduction. Baltimore, Maryland, USA. July 28-31, 2002.
CODEN: BIREBV. ISSN: 0006-3363.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 28 Aug 2002
Last Updated on STN: 28 Aug 2002

L36 ANSWER 11 OF 14 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 2000495366 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 10985864
TITLE: GSK-3: new thoughts on an old enzyme.
AUTHOR: Ferkey D M; Kimelman D

CORPORATE SOURCE: Department of Biochemistry, University of Washington, Seattle, Washington 98195-7350, USA.
CONTRACT NUMBER: HD27262 (United States NICHD)
T32HD07183 (United States NICHD)
SOURCE: Developmental biology, (2000 Sep 15) Vol. 225, No. 2, pp. 471-9. Ref: 87
Journal code: 0372762. ISSN: 0012-1606.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 27 Oct 2000
Last Updated on STN: 18 Dec 2002
Entered Medline: 16 Oct 2000

L36 ANSWER 12 OF 14 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 2001078732 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 11087679
TITLE: Purification of GSK-3 by affinity chromatography on immobilized axin.
AUTHOR: Primot A; Baratte B; Gompel M; Borgne A; Liabeuf S; Romette J L; Jho E H; Costantini F; Meijer L
CORPORATE SOURCE: Station Biologique, CNRS, BP 74, 29682 Roscoff cedex, Bretagne, France.
SOURCE: Protein expression and purification, (2000 Dec) Vol. 20, No. 3, pp. 394-404.
Journal code: 9101496. ISSN: 1046-5928.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ENTRY DATE: Entered STN: 22 Mar 2001
Last Updated on STN: 18 Dec 2002
Entered Medline: 11 Jan 2001

AB Glycogen synthase kinase 3 (GSK-3), an element of the Wnt signalling pathway, plays a key role in numerous cellular processes including cell proliferation, embryonic development, and neuronal functions. It is directly involved in diseases such as cancer (by controlling apoptosis and the levels of beta-catenin and cyclin D1), Alzheimer's disease (tau hyperphosphorylation), and diabetes (as a downstream element of insulin action, GSK-3 regulates glycogen and lipid synthesis). We describe here a rapid and efficient method for the purification of GSK-3 by affinity chromatography on an immobilized fragment of axin. Axin is a docking protein which interacts with GSK-3ss, beta-catenin, phosphatase 2A, and APC. A polyhistidine-tagged axin peptide (residues 419-672) was produced in Escherichia coli and either immobilized on Ni-NTA agarose beads or purified and immobilized on CNBr-activated Sepharose 4B. These "Axin-His6" matrices were found to selectively bind recombinant rat GSK-3 beta and native GSK-3 from
yeast, sea urchin embryos, and porcine brain. The affinity-purified enzymes displayed high kinase activity. This single step purification method provides a convenient tool to follow the status of GSK-3 (protein level, phosphorylation state, kinase activity) under various physiological settings. It also provides a simple and efficient way to purify large amounts of active recombinant or native GSK-3 for screening purposes.
Copyright 2000 Academic Press.

L36 ANSWER 13 OF 14 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2000:114828 BIOSIS Full-text
DOCUMENT NUMBER: PREV200000114828
TITLE: TCF is the nuclear effector of the beta-catenin signal that patterns the sea urchin animal-vegetal axis.
AUTHOR(S): Vonica, Alin; Weng, Wei; Gumbiner, Barry M.; Venuti, Judith M. [Reprint author]
CORPORATE SOURCE: Department of Anatomy and Cell Biology, College of Physicians and Surgeons of Columbia University, 630 W. 168th Street, New York, NY, 10032, USA
SOURCE: Developmental Biology, (Jan. 15, 2000) Vol. 217, No. 2, pp. 230-243. print.
CODEN: DEBIAO. ISSN: 0012-1606.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Mar 2000
Last Updated on STN: 3 Jan 2002

AB The mechanism of animal-vegetal (AV) axis formation in the sea urchin embryo is incompletely understood. Specification of the axis is thought to involve a combination of cell-cell signals and as yet unidentified maternal determinants. In Xenopus the Wnt pathway plays a crucial role in defining the embryonic axes. Recent experiments in sea urchins have shown that at least two components of the Wnt signaling pathway, GSK3beta and beta-catenin, are involved in embryonic AV axis patterning. These results support the notion that the developmental network that regulates axial patterning in deuterostomes is evolutionarily conserved. To further test this hypothesis, we have examined the role of beta-catenin nuclear binding partners, members of the TCF family of transcriptional regulators, in sea urchin AV axis patterning. To test the role of TCFs in mediating beta-catenin signals in sea urchin AV axis development we examined the consequences of microinjecting RNAs encoding altered forms of TCF on sea urchin development. We show that expression of a dominant negative TCF results in a classic "animalized" embryo. In contrast, microinjected RNA encoding an activated TCF produces a highly "vegetalized" embryo. We show that the transactivational activity of endogenous sea urchin TCF is potentiated by LiCl treatment, which vegetalizes embryos by inhibiting GSK3, consistent with an in vivo interaction between endogenous beta-catenin and TCF. We also provide evidence indicating that all of beta-catenin's activity in patterning the sea urchin AV axis is mediated by TCF. Using a glucocorticoid-responsive TCF, we show that TCF transcriptional activity affects specification along the AV axis between fertilization and the 60-cell stage.

L36 ANSWER 14 OF 14 MEDLINE on STN DUPLICATE 7
ACCESSION NUMBER: 2000130938 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 10662688
TITLE: Inhibition of cyclin-dependent kinases, GSK-3beta and CK1 by hymenialdisine, a marine sponge constituent.
AUTHOR: Meijer L; Thunnissen A M; White A W; Garnier M; Nikolic M; Tsai L H; Walter J; Cleverley K E; Salinas P C; Wu Y Z; Biernat J; Mandelkow E M; Kim S H; Pettit G R
CORPORATE SOURCE: CNRS, Station Biologique, Roscoff cedex, 29682, France.. meijer@sb-roscoff.fr
CONTRACT NUMBER: CA-44344A1-05-10 (United States NCI)
SOURCE: Chemistry & biology, (2000 Jan) Vol. 7, No. 1, pp. 51-63. Journal code: 9500160. ISSN: 1074-5521.
PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200003
ENTRY DATE: Entered STN: 27 Mar 2000
Last Updated on STN: 18 Dec 2002
Entered Medline: 13 Mar 2000

AB BACKGROUND: Over 2000 protein kinases regulate cellular functions. Screening for inhibitors of some of these kinases has already yielded some potent and selective compounds with promising potential for the treatment of human diseases. RESULTS: The marine sponge constituent hymenialdisine is a potent inhibitor of cyclin-dependent kinases, glycogen synthase kinase-3beta and casein kinase 1. Hymenialdisine competes with ATP for binding to these kinases. A CDK2-hymenialdisine complex crystal structure shows that three hydrogen bonds link hymenialdisine to the Glu81 and Leu83 residues of CDK2, as observed with other inhibitors. Hymenialdisine inhibits CDK5/p35 in vivo as demonstrated by the lack of phosphorylation/down-regulation of Pak1 kinase in E18 rat cortical neurons, and also inhibits GSK-3 in vivo as shown by the inhibition of MAP-1B phosphorylation. Hymenialdisine also blocks the in vivo phosphorylation of the microtubule-binding protein tau at sites that are hyperphosphorylated by GSK-3 and CDK5/p35 in Alzheimer's disease (cross-reacting with Alzheimer's-specific AT100 antibodies). CONCLUSIONS: The natural product hymenialdisine is a new kinase inhibitor with promising potential applications for treating neurodegenerative disorders.

=> s l16 and l17 and l18 and l19
L37 0 FILE MEDLINE
L38 0 FILE BIOSIS
L39 0 FILE EMBASE

TOTAL FOR ALL FILES
L40 0 L16 AND L17 AND L18 AND L19

=> fil caplus

FILE 'CAPLUS' ENTERED AT 10:27:21 ON 22 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Jul 2008 VOL 149 ISS 4
FILE LAST UPDATED: 20 Jul 2008 (20080720/ED)

Caplus now includes complete International Patent Classification (IPC)

```
reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> dis his nofile

     (FILE 'HOME' ENTERED AT 10:10:31 ON 22 JUL 2008)

     FILE 'REGISTRY' ENTERED AT 10:10:44 ON 22 JUL 2008
L1             STR
L2           0 SEA SSS SAM L1
L3             STR L1
L4           1 SEA SSS SAM L3
               D SCAN
L5          11 SEA SSS FUL L3
L6             STR L3
L7           6 SEA SSS SAM L6
L8          57 SEA SSS FUL L6
L9          11 SEA SUB=L5 SSS FUL L6
L10         46 SEA ABB=ON  PLU=ON  L8 NOT L9
               D L5 QUE STAT
               D L10 QUE STAT

     FILE 'CAPLUS' ENTERED AT 10:17:27 ON 22 JUL 2008
L11         54 SEA ABB=ON  PLU=ON  L5 OR L10
               D 1-11 IBIB ABS HITSTR
               D 12-54 IBIB ABS HITSTR

     FILE 'REGISTRY' ENTERED AT 10:20:27 ON 22 JUL 2008
               E GSK 3/CN
L12          1 SEA ABB=ON  PLU=ON  ("GSK 3 INHIBITOR IX"/CN OR "GSK 3 IX"/CN)


     FILE 'CAPLUS' ENTERED AT 10:20:56 ON 22 JUL 2008
L13         15 SEA ABB=ON  PLU=ON  L12
L14         15 SEA ABB=ON  PLU=ON  L13 NOT L11
               SET LINE 250
               SET DETAIL OFF
               E OCEAN+ALL/CT
               SET LINE LOGIN
               SET DETAIL LOGIN
L15          0 SEA ABB=ON  PLU=ON  L14 AND (MARINE OR SEA OR OCEAN? OR
               AQUATIC)
               D 1-15 IBIB ABS HIT L14
L16          4 SEA ABB=ON  PLU=ON  GORDILLO D?/AU
L17        194 SEA ABB=ON  PLU=ON  DIAZ, I?/AU
L18       1039 SEA ABB=ON  PLU=ON  MARTINEZ-GIL A?/AU OR GIL A?/AU
L19          2 SEA ABB=ON  PLU=ON  DEL PLIEGO G?/AU OR PLIEGO G?/AU
L20          0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19

     FILE 'MEDLINE, BIOSIS, EMBASE, OCEAN' ENTERED AT 10:24:42 ON 22 JUL 2008
L21          0 SEA ABB=ON  PLU=ON  L5 OR L10
L22          5 SEA ABB=ON  PLU=ON  L5 OR L10
L23          0 SEA ABB=ON  PLU=ON  L5 OR L10
               D L22 1-5
L24        935 SEA ABB=ON  PLU=ON  GSK 3 OR L14
L25       2269 SEA ABB=ON  PLU=ON  GSK 3 OR L14
```

```
L26          1684 SEA ABB=ON  PLU=ON  GSK 3 OR L14
L27           935 SEA ABB=ON  PLU=ON  GSK 3
L28          2269 SEA ABB=ON  PLU=ON  GSK 3
L29          1684 SEA ABB=ON  PLU=ON  GSK 3
L30             0 SEA ABB=ON  PLU=ON  GSK 3
     TOTAL FOR ALL FILES
L31          4888 SEA ABB=ON  PLU=ON  GSK 3

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:26:37 ON 22 JUL 2008
L32             6 SEA ABB=ON  PLU=ON  L27 AND (MARINE OR SEA OR OCEAN? OR
                  AQUATIC)
L33            13 SEA ABB=ON  PLU=ON  L28 AND (MARINE OR SEA OR OCEAN? OR
                  AQUATIC)
L34             5 SEA ABB=ON  PLU=ON  L29 AND (MARINE OR SEA OR OCEAN? OR
                  AQUATIC)
     TOTAL FOR ALL FILES
L35            24 SEA ABB=ON  PLU=ON  L31 AND (MARINE OR SEA OR OCEAN? OR
                  AQUATIC)
L36            14 DUP REM L35 (10 DUPLICATES REMOVED)
                  D 1-14 IBIB ABS
L37             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
L38             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
L39             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
     TOTAL FOR ALL FILES
L40             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19

     FILE 'CAPLUS' ENTERED AT 10:27:21 ON 22 JUL 2008

=> s (15 or 18) and (116 or 117 or 118 or 119)
            11 L5
            54 L8
L41          1 (L5 OR L8) AND (L16 OR L17 OR L18 OR L19)

=> d ibib abs hitstr

L41  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2005:523439  CAPLUS  Full-text
DOCUMENT NUMBER:          143:65320
TITLE:                    GSK-3 inhibitors isolated from marine organisms
INVENTOR(S):              Alonso Gordillo, Diana; Dorronsoro Diaz, Isabel;
                          Martinez Gil, Ana; Panizo del Pliego, Gema;
                          Fuertes Huerta, Ana; Perez Puerto, Ma Jose; Martin
                          Aparicio, Ester; Perez Navarro, Dario; Medina Padilla,
                          Miguel
PATENT ASSIGNEE(S):       Neuropharma, S. A., Spain; Ruffles, Graham Keith
SOURCE:                   PCT Int. Appl., 26 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    -------------------    --------
     WO 2005054221        A1    20050616    WO 2004-GB50033        20041202
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
```

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1689730 A1 20060816 EP 2004-819730 20041202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

US 20070088080 A1 20070419 US 2006-596188 20060914
PRIORITY APPLN. INFO.: GB 2003-27908 A 20031202
WO 2004-GB50033 W 20041202

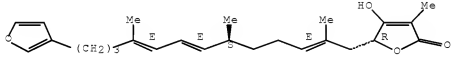
OTHER SOURCE(S): MARPAT 143:65320

AB The present invention provides the use of a compound, e.g., palinurin, tricantin, in the preparation of a medicament for the treatment of a disease requiring a GSK-3 inhibitor. Also provided are methods of treating chronic neurodegenerative conditions. Palinurin and tricantin were isolated from Ircinia dendroides and their structures were determined

IT 71947-64-3 853885-55-9, Tricantin
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(GSK-3 inhibitors from marine organisms)

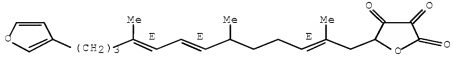
RN 71947-64-3 CAPLUS
CN 2(5H)-Furanone, 5-[(2E,6S,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]-4-hydroxy-3-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 853885-55-9 CAPLUS
CN 2,3,4(5H)-Furantrione, [(2E,7E,9E)-13-(3-furanyl)-2,6,10-trimethyl-2,7,9-tridecatrien-1-yl]- (CA INDEX NAME)

Double bond geometry as shown.
Currently available stereo shown.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

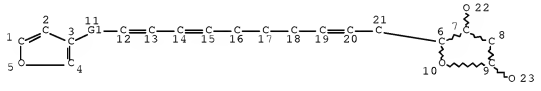
=> dis his nofile;d l5 que stat;d l8 que stat

(FILE 'HOME' ENTERED AT 10:10:31 ON 22 JUL 2008)

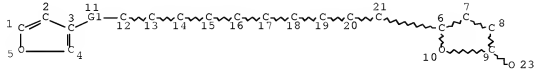
FILE 'REGISTRY' ENTERED AT 10:10:44 ON 22 JUL 2008

```
L1              STR
L2            0 SEA SSS SAM L1
L3              STR L1
L4            1 SEA SSS SAM L3
                D SCAN
L5           11 SEA SSS FUL L3
L6              STR L3
L7            6 SEA SSS SAM L6
L8           57 SEA SSS FUL L6
L9           11 SEA SUB=L5 SSS FUL L6
L10          46 SEA ABB=ON  PLU=ON  L8 NOT L9
                D L5 QUE STAT
                D L10 QUE STAT

     FILE 'CAPLUS' ENTERED AT 10:17:27 ON 22 JUL 2008
L11          54 SEA ABB=ON  PLU=ON  L5 OR L10
                D 1-11 IBIB ABS HITSTR
                D 12-54 IBIB ABS HITSTR

     FILE 'REGISTRY' ENTERED AT 10:20:27 ON 22 JUL 2008
                E GSK 3/CN
L12           1 SEA ABB=ON  PLU=ON  ("GSK 3 INHIBITOR IX"/CN OR "GSK 3 IX"/CN)


     FILE 'CAPLUS' ENTERED AT 10:20:56 ON 22 JUL 2008
L13          15 SEA ABB=ON  PLU=ON  L12
L14          15 SEA ABB=ON  PLU=ON  L13 NOT L11
                SET LINE 250
                SET DETAIL OFF
                E OCEAN+ALL/CT
                SET LINE LOGIN
                SET DETAIL LOGIN
L15           0 SEA ABB=ON  PLU=ON  L14 AND (MARINE OR SEA OR OCEAN? OR
                AQUATIC)
                D 1-15 IBIB ABS HIT L14
L16           4 SEA ABB=ON  PLU=ON  GORDILLO D?/AU
L17         194 SEA ABB=ON  PLU=ON  DIAZ, I?/AU
L18        1039 SEA ABB=ON  PLU=ON  MARTINEZ-GIL A?/AU OR GIL A?/AU
L19           2 SEA ABB=ON  PLU=ON  DEL PLIEGO G?/AU OR PLIEGO G?/AU
L20           0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19

     FILE 'MEDLINE, BIOSIS, EMBASE, OCEAN' ENTERED AT 10:24:42 ON 22 JUL 2008
L21           0 SEA ABB=ON  PLU=ON  L5 OR L10
L22           5 SEA ABB=ON  PLU=ON  L5 OR L10
L23           0 SEA ABB=ON  PLU=ON  L5 OR L10
                D L22 1-5
L24         935 SEA ABB=ON  PLU=ON  GSK 3 OR L14
L25        2269 SEA ABB=ON  PLU=ON  GSK 3 OR L14
L26        1684 SEA ABB=ON  PLU=ON  GSK 3 OR L14
L27         935 SEA ABB=ON  PLU=ON  GSK 3
L28        2269 SEA ABB=ON  PLU=ON  GSK 3
L29        1684 SEA ABB=ON  PLU=ON  GSK 3
L30           0 SEA ABB=ON  PLU=ON  GSK 3
     TOTAL FOR ALL FILES
L31        4888 SEA ABB=ON  PLU=ON  GSK 3

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:26:37 ON 22 JUL 2008
L32           6 SEA ABB=ON  PLU=ON  L27 AND (MARINE OR SEA OR OCEAN? OR
                AQUATIC)
L33          13 SEA ABB=ON  PLU=ON  L28 AND (MARINE OR SEA OR OCEAN? OR
```

```
                AQUATIC)
L34             5 SEA ABB=ON  PLU=ON  L29 AND (MARINE OR SEA OR OCEAN? OR
                AQUATIC)
     TOTAL FOR ALL FILES
L35            24 SEA ABB=ON  PLU=ON  L31 AND (MARINE OR SEA OR OCEAN? OR
                AQUATIC)
L36            14 DUP REM L35 (10 DUPLICATES REMOVED)
                D 1-14 IBIB ABS
L37             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
L38             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
L39             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19
     TOTAL FOR ALL FILES
L40             0 SEA ABB=ON  PLU=ON  L16 AND L17 AND L18 AND L19

     FILE 'CAPLUS' ENTERED AT 10:27:21 ON 22 JUL 2008
L41             1 SEA ABB=ON  PLU=ON  (L5 OR L8) AND (L16 OR L17 OR L18 OR L19)
                D IBIB ABS HITSTR


L3              STR
```



```
REP G1=(3-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE
L5            11 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED     330 ITERATIONS                          11 ANSWERS
SEARCH TIME: 00.00.01



L6              STR
```



```
REP G1=(0-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
```

```
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  22

STEREO ATTRIBUTES: NONE
L8            57 SEA FILE=REGISTRY SSS FUL L6

100.0% PROCESSED     383 ITERATIONS                          57 ANSWERS
SEARCH TIME: 00.00.01


=> log y

STN INTERNATIONAL LOGOFF AT 10:28:15 ON 22 JUL 2008
```